S. Hrg. 99-236

HYDROELECTRIC RELICENSING

HEARING

BEFORE THE

SUBCOMMITTEE ON WATER AND POWER

OF THE

COMMITTEE ON
ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE

NINETY-NINTH CONGRESS

FIRST SESSION

ON

S. 403

A BILL TO AMEND THE FEDERAL POWER ACT TO ESTABLISH POLICY AND PROCEDURES TO GUIDE THE FEDERAL ENERGY REGULATORY COMMISSION IN THE ISSUANCE OF NEW LICENSES TO OPERATE EXISTING HYDROELECTRIC FACILITIES

S. 426

A BILL TO AMEND THE FEDERAL POWER ACT TO PROVIDE FOR MORE PROTECTION TO ELECTRIC CONSUMERS

S. 1219

A BILL TO AMEND THE FEDERAL POWER ACT TO ENSURE FAIR COMPETITION IN THE LICENSING OF EXISTING HYDROELECTRIC PROJECTS AND, IN DOING SO, TO MAINTAIN AND ENHANCE DIVERSITY WITHIN THE ELECTRIC UTILITY INDUSTRY, THEREBY ENSURING THE MAXIMUM DEVELOPMENT AND UTILIZATION OF THE NATION'S PUBLIC RESOURCES FOR THE BENEFIT OF ALL ELECTRIC CONSUMERS, AND FOR OTHER PURPOSES

S. 1260

A BILL ENTITLED THE "HYDROELECTRIC RELICENSING REFORM ACT"

JUNE 11, 1985

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HYDROELECTRIC RELICENSING

TUESDAY, JUNE 11, 1985

U.S. SENATE,
SUBCOMMITTEE ON WATER AND POWER,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC.

The subcommittee met, pursuant to notice, at 10:05 a.m., in room SD-366, Dirksen Office Building, Hon. Frank H. Murkowski, presiding.

Present: Senators Murkowski, Hatfield, Wallop, Nickles, Hecht, Evans, Johnston, Ford, Metzenbaum, Melcher, and Bingaman.

Also present: Russell R. Brown, professional staff member; and William B. Conway, counsel for the minority.

OPENING STATEMENT OF HON. FRANK H. MURKOWSKI, A U.S. SENATOR FROM THE STATE OF ALASKA

Senator MURKOWSKI. Good morning. We will call to order the Subcommittee on Water and Power of the Committee on Energy and Natural Resources.

The hearing this morning before the Subcommittee on Water and Power is to take testimony on four bills related primarily to the relicensing by the Federal Energy Regulatory Commission of existing non-Federal hydroelectric projects.

I might ask if there is some way to accommodate a portion of the people who are standing in the back.

Russ, how are you going to accommodate them? [Laughter.]

Senator MURKOWSKI. This is Russ Brown's hearing so it is up to him to bear that responsibility. Maybe some could move that way and down this wall. Somebody is going to have to start the movement unless you are very comfortable back there.

Copies of the four bills, S. 403, S. 426, S. 1219, and S. 1260, will appear in the hearing record at the conclusion of my remarks.

Because of the large number of witnesses—and I am told that there are 33—I would hope that as many of you as possible will summarize your statements. Your full written comments will appear in the hearing record.

Mr. Brown advises me that if we are to complete our agenda, witnesses are asked to keep their remarks to 5 minutes. That seems to work over in the House. We will see if it works over here, but we will time you, and due to the large list, we would request that you respect that requirement. In this way I think we will have time for questions. I would urge members of the committee to submit written questions to the witnesses for later inclusion in the record when possible.

Since two of the bills, S. 1219 and S. 1260, were added to the agenda after the first announcement of the hearing, many of you may not have had the opportunity to fully review their content. Therefore, I will leave the hearing record open for 2 weeks to afford you sufficient time to review the bills and submit any comments you may have. The record will also be open to receive any other additional material which you may wish to submit.

In deference to the many witnesses, I have made my own remarks brief. As you know, I am a cosponsor of S. 426. There is no question in my mind that the Congress should clarify the relicensing issue. In doing so, we should address three fundamental questions, and those three are: One, will the proposed legislation promote the development of our Nation's water resources? Two, will the legislation serve to encourage reliable electric service to the consumer? And third, will the legislation not impose an undue burden on the ratepayer.

The issue of relicensing is complex. Witness the four bills before the subcommittee today. But in the course of our deliberations, I hope that we will keep the interests of the ratepayers utmost in our minds. We all know who really pays.

I would call on my colleague, Senator Wallop, who is a sponsor of S. 426.

Please proceed.

[The texts of S. 403, S. 426, S. 1219, and S. 1260 follow:]

99TH CONGRESS
1ST SESSION

S. 403

To amend the Federal Power Act to establish policy and procedures to guide the Federal Energy Regulatory Commission in the issuance of new licenses to operate existing hydroelectric facilities.

IN THE SENATE OF THE UNITED STATES

FEBRUARY 6 (legislative day, JANUARY 21), 1985

Mr. JOHNSTON introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

---

A BILL

To amend the Federal Power Act to establish policy and procedures to guide the Federal Energy Regulatory Commission in the issuance of new licenses to operate existing hydroelectric facilities.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be referred to as the "Hydroelectric Facility Relicensing Amendments of 1985".

SEC. 2. Section 7(a) of the Federal Power Act (16 U.S.C. 800(a)) is amended—

(a) by inserting "original" after "hereunder or"; and

(b) by striking "and in issuing licenses to new licensees under section 15 hereof".

Sec. 3. Section 15 of the Federal Power Act (16 U.S.C. 808) is amended—

(a) by striking subsection (a) through "terms and conditions to a new licensee," and inserting in lieu thereof:

"Sec. 15(a). If the United States does not, at the expiration of the existing license, exercise its right to take over any project or projects of the licensee, as provided in section 14, the Commission may issue a new license to the existing licensee or to a new licensee. If the existing licensee applies for a new license, the Commission shall issue a new license to such existing licensee unless the Commission determines that the plans of another applicant are better adapted to serve the public interest. If the existing licensee does not apply for a new license, the Commission shall issue a new license to the applicant the plans of which are best adapted to serve the public interest. The Commission shall not issue a license unless it is satisfied that the applicant is able to carry out such plans.

"(b) In making a determination of the public interest under subsection (a), the Commission shall consider—

"(1) the plans of each applicant to develop, conserve, and utilize in the public interest the water resources of the region;

"(2) the relative economic impact upon customers served by each applicant upon the failure of such applicant to receive the license;

"(3) the ability of each applicant to operate and maintain the project in a manner most likely to provide efficient, reliable electric service; and

"(4) the need of each applicant for the electricity generated by the project or projects to serve its existing customers.";

(b) by redesignating the remainder of subsection (a) as subsection (c);

(c) by striking "which license" and inserting in lieu thereof "A license issued under this section"; and

(d) by redesignating existing subsection (b) as subsection (d).

99TH CONGRESS
1ST SESSION

S. 426

To amend the Federal Power Act to provide for more protection to electric consumers.

IN THE SENATE OF THE UNITED STATES

FEBRUARY 7 (legislative day, JANUARY 21), 1985

Mr. WALLOP (for himself, Mr. SIMPSON, Mr. GARN, Mr. HECHT, Mr. GOLDWATER, Mr. HEFLIN, Mr. WILSON, Mr. LAXALT, Mr. CRANSTON, Mr. DENTON, Mr. CHAFEE, Mr. MURKOWSKI, and Mr. DODD) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

---

A BILL

To amend the Federal Power Act to provide for more protection to electric consumers.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Electric Consumers Protection Act of 1985".

SEC. 2. Section 7(a) of the Federal Power Act (16 U.S.C. 800(a)) is amended—

(1) by inserting "original" after "hereunder or"; and

(2) by striking out "and in issuing licenses to new licensees under section 15 hereof".

SEC. 3. Section 15(a) of the Federal Power Act (16 U.S.C. 808(a)) is amended—

(1) by striking out "is authorized to" and inserting in lieu thereof "shall";

(2) by striking out "original" each place it appears and inserting in lieu thereof "existing";

(3) by striking out "regulations, or" and inserting in lieu thereof "regulations unless the Commission determines, taking into account public benefits provided during the preceding license term, that such licensee's project or projects, as described in its application for a new license, will not meet the licensing standards set forth in section 10(a). If the Commission determines that the project or projects do not meet such standards, it is authorized"; and

(4) by striking out "such amount" and inserting in lieu thereof "just compensation in an amount that the Commission shall determine in accordance with due process of law,"; and by striking the comma after the words "to do".

99TH CONGRESS
1ST SESSION

S. 1219

To amend the Federal Power Act to ensure fair competition in the licensing of existing hydroelectric projects and, in doing so, to maintain and enhance diversity within the electric utility industry, thereby ensuring the maximum development and utilization of the Nation's public resources for the benefit of all electric consumers, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MAY 24 (legislative day, APRIL 15), 1985

Mr. METZENBAUM introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

---

A BILL

To amend the Federal Power Act to ensure fair competition in the licensing of existing hydroelectric projects and, in doing so, to maintain and enhance diversity within the electric utility industry, thereby ensuring the maximum development and utilization of the Nation's public resources for the benefit of all electric consumers, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SHORT TITLE

SECTION 1. (a) This Act may be cited as the "Fair Competition in Hydroelectric Licensing Act of 1985".

DECLARATION OF POLICY

(b) It is hereby declared to be the policy of Congress to ensure fair competition in the licensing of hydroelectric projects subject to license under this Act on the Nation's waterways and, in doing so, to maintain and enhance diversity within the electric utility industry. Competition in the licensing process, among diverse elements of the electric utility industry, ensures the best comprehensive development and utilization of this multipurpose resource in the most cost-effective manner by ensuring full and careful consideration of all potential uses of these waterways, including power production, recreation, navigation, flood control, water supply, and irrigation, consistent with environmental protection.

LICENSING EXISTING HYDROELECTRIC PROJECTS

SEC. 2. (a) Section 7(a) of the Federal Power Act (16 U.S.C. section 800(a)) is amended to eliminate in connection with the licensing of existing hydroelectric projects the last right afforded States and municipalities to amend their plans—

(1) by inserting "original" as the seventh word in the section after "hereunder or", and

(2) by striking out "and in issuing licenses to new licensees under section 15 hereof".

(b) Section 7 of the Federal Power Act is amended by adding the following new subsections at the end thereof:

"(d)(1) In issuing a license under section 15 of this Act, when more than one applicant has applied for the license, the Commission, taking into account the need to maintain and enhance diversity within the electric utility industry, shall issue the license to the applicant whose proposal the Commission determines is best adapted to a comprehensive plan as set forth in section 10(a) of this Act. In making such determination, the Commission shall consider, compare, and make findings as to all relevant matters respecting each proposal, including—

"(A) the plans of each applicant to improve and utilize the project, including the proposed utilization by each applicant to achieve efficiency in the production and consumption of electric power, to develop and utilize the waterway or waterways for the use or benefit of interstate or foreign commerce to which the licensed project is related, and for other beneficial public uses, including recreation, navigation, flood control, water supply, and irrigation; and

"(B) the plans of each applicant to avoid or mitigate adverse impacts on fish, wildlife, natural, cultural, and recreational resources related to the continued use and operation of such project and to provide for public opportunities to use and benefit from such resources.

"(2) When the existing licensee and one or more competing applicants have applied for a license under section 15 of this Act, the Commission shall not deny a license to a competing applicant because the competing applicant has not previously operated a hydroelectric project.

"(3) Upon request, the existing licensee shall make available to an entity planning to file a competing application for a new license under section 15 of this Act all plans, drawings, designs, data, and any other information relating to the construction and operation of the project necessary to enable such applicant to file a competing application for the new license and shall grant such competing applicant access to the project works and lands upon reasonable advance notice: *Provided*, That the utility making the request agrees to compensate the existing licensee for the reasonable costs of providing such information.

"(4) The existing licensee shall agree to perform with other competing applicants willing to share in the costs thereof, joint environmental, archaeological, cultural, and any other studies required to be submitted with a license application to the extent that (i) such studies would otherwise be duplicative of studies to be performed by the existing licensee and (ii) the relevant governmental agency that recommends or reviews such studies approves the joint study plan. Nothing in this provision shall preclude any party from supplementing such studies at its own expense.

"(5) In the event the Commission determines that the proposal of any State or municipality for a license under section 15 of this Act is equally well adapted as the proposal of any other applicant to a comprehensive plan as set forth in section 10(a) of this Act, the Commission shall give preference to the proposal of the State or municipality for the license.

"(e) In implementing its authority under section 10(a) of this Act to require modification of any project and of the plans and specifications of project works in conjunction with the issuance of any license for a project under section 15 of this Act, the Commission—

"(1) shall, to the maximum extent practicable, protect against and mitigate the adverse impacts on fish, wildlife, natural, cultural, and recreational resources related to the continued use and operation of such project and provide for public opportunities to use and benefit from such resources, and

"(2) may, to the extent found appropriate for the proper utilization and conservation of natural resources, require the adoption and implementation of electricity consumption efficiency improvement programs including, in the case of an electric utility applicant, plans to assist its customers to conserve electricity cost effectively, taking into account the policies, restrictions, and requirements of relevant regulatory authorities.

"(f) The Commission shall include in each license it issues under section 15 of this Act a condition that requires any electric utility licensee, during the license term,

"(1) to provide transmission services to other electric utilities over its transmission facilities, under just and reasonable rates, terms, and conditions, and for that purpose, if necessary

"(2) to increase the transmission capacity of any bulk power transmission facility which it owns or operates, subject to just and reasonable compensation therefor,

if such transmission services or such increase in transmission capacity is necessary or appropriate in order to conserve energy, promote the efficient use of facilities and resources, increase competition in the bulk power supply market, or is otherwise in the public interest.

"(g) In cases where facilities for the transmission of power from the project exist, the Commission shall not, in evaluating applications for licenses under section 15 of this Act, consider whether an applicant has, or has access to, adequate transmission facilities, and, when a license is awarded to a new licensee which is not the existing licensee, the Commission shall order the existing licensee—

"(1) to provide transmission services over its transmission facilities, under just and reasonable rates, terms, and conditions, and

"(2) to increase the transmission capacity of any bulk power transmission facility which it owns or operates, subject to just and reasonable compensation therefor,

where such transmission services or such increase in transmission capacity is necessary to permit transmission of the output of the project to the new licensee.".

PROVISION OF POWER FOR EXISTING LICENSEE'S CUSTOMERS

SEC. 3. Section 15(a) of the Federal Power Act (16 U.S.C. section 808(a)) is amended by striking "original" in each place it appears and substituting "existing" and by striking ": *Provided,*" and inserting the following: "and make available at the project to the existing licensee, for the benefit of the customers of such licensee, up to an average of 25 per centum of the output of the project for the initial one-fifth of the license term at the new licensee's cost of power and energy from the project: *Provided,* That the provision of such output shall not adversely affect the status of any bonds, notes, or obligations issued, or to be issued, by the new licensee under the then applicable tax laws: *And provided further,*".

ISSUANCE OF NEW LICENSES

SEC. 4. Section 15 of the Federal Power Act (16 U.S.C. section 808) is amended by adding the following new subsection at the end thereof:

"(c) Any new license issued under this section shall be issued by the Commission no later than twelve months prior to the expiration date of the existing license to take effect on the date of expiration. The Commission shall report to Congress within one hundred and eighty days from the date of the enactment of this Act on the procedures it will implement in order to ensure that it will be able to comply with this subsection, including giving such license proceedings priority on its docket, and shall file an annual report with Congress identifying all projects for which new licenses have not been issued in accordance with this subsection and stating the reasons therefor.".

RELICENSING ANTITRUST PROVISION

SEC. 5. The Federal Power Act is hereby amended by adding the following new section 15A (16 U.S.C. section 808A):

"(a) The Commission shall promptly transmit to the Attorney General a copy of any application for a license under section 15 of this Act, and the Attorney General shall, within a reasonable time, but in no event to exceed one hundred and eighty days after receiving a copy of such application, advise the Commission whether the activities under the license would tend to create or maintain a situation inconsistent with the antitrust laws as specified in subsection (c) of this section. Such advice shall include an explanatory statement as to the reasons or basis therefor.

"(b) In issuing a license under section 15 of this Act, the Commission shall give due consideration to the advice received from the Attorney General, and the Commission shall not issue a license where it finds that the activities under such license would tend to create or maintain a situation inconsistent with the antitrust laws as specified in subsection (c) of this section. The Commission may include conditions in a license to assure that activities under the license will not create or maintain a situation inconsistent with the antitrust laws, as specified in subsection (c) of this section.

"(c) As used in this section, 'antitrust laws' shall include the following Acts, as amended, 'An Act to protect trade and commerce against unlawful restraints and monopolies' approved July 2, 1890 (15 U.S.C. section 1 et seq.); sections 73 to 77, inclusive, of an Act entitled 'An Act to reduce taxation, to provide revenue for the Government, and for other purposes' approved August 27, 1894 (15 U.S.C. sections 8 et seq.); 'An Act to supplement existing laws against unlawful restraints and monopolies, and for other purposes' approved October 15, 1914 (15 U.S.C. sections 12, 13, 14 et seq.; 20, 21, 22 et seq.; 29 U.S.C. sections 52, 53); and 'An Act to create a Federal Trade Commission, to define its powers and duties, and for other purposes' approved September 26, 1914 (15 U.S.C. sections 41 et seq., 47, 48, 50 et seq.).".

REPEAL OF PROVISION FOR EXEMPTION FROM LICENSING

SEC. 6. Subsection (d) of section 405 of the Public Utility Regulatory Policies Act (16 U.S.C. section 2705(d)) is hereby repealed.

AMENDMENT REGARDING NEW DAMS

SEC. 7. Section 210 of the Public Utilities Regulatory Policies Act of 1978 is amended by adding the following at the end thereof:

"(k) NEW HYDROELECTRIC DAMS.—

"(1) CERTAIN PROVISIONS INAPPLICABLE.—The provisions of this section (other than subsection (e)) shall not apply to a hydroelectric generation facility, if such facility impounds or diverts the water of a natural watercourse other than by means of an existing dam or diversion.

"(2) DEFINITIONS.—For purposes of this subsection—

"(A) EXISTING DAM OR DIVERSION.—The term 'existing dam or diversion' means any dam or diversion—

"(i) the construction of which was commenced on or before the enactment of this subsection, and

"(ii) which the Commission determines does not require any construction or enlargement of impoundment structures (other than repairs of reconstruction) except for the addition of flashboards (or similar adjustable devices).

"(B) COMMENCEMENT OF CONSTRUCTION.—The term 'commencement' when used with respect to construction means the beginning of physical onsite building or excavating activities other than preliminary surveys, testing, and planning activities.".

SAVINGS PROVISIONS

SEC. 8. The amendments made by sections 1–6 of this Act shall not apply (a) to any project for which an application for a new license is pending on the date of the enactment of this Act or (b) to any proceeding if an application competing with an application to be filed by the existing licensee has been filed at the Commission before the date of the enactment of this Act.

99TH CONGRESS
1ST SESSION

S. 1260

Entitled the "Hydroelectric Relicensing Reform Act".

IN THE SENATE OF THE UNITED STATES

JUNE 7 (legislative day, JUNE 3), 1985

Mr. EVANS introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

---

A BILL

Entitled the "Hydroelectric Relicensing Reform Act".

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited at the "Hydroelectric Relicensing Reform Act of 1985".

SEC. 2. The Federal Power Act (Act of June 10, 1920, 41 Stat. 1063, 16 U.S.C. 791a et seq., and Acts amendatory thereof and supplementary thereto) is amended—

(1) in section 7(a) (16 U.S.C. 800(a)), by inserting "original" after "hereunder or";

(2) by striking "and in issuing licenses to new licensees under section 808 of this title";

(3) in section 14(a) (16 U.S.C. 807(a)), by striking "two years" and inserting in lieu thereof "three years";

(4) by striking section 14(b) (16 U.S.C. 807(b)); and

(5) by striking subsection 15(a) (16 U.S.C. 808(a)) and inserting in lieu thereof the following new subsection:

"(a)(1) The existing licensee shall make known its intention to file for a new license no later then three years prior to the expiration of the existing license. If the existing licensee intends to file for a new license, it shall submit its initial application to the Commission, including all maps, plans and specifications, within six months of filing by the existing licensee of a notice of intent under this subsection. Such maps, plans and specifications shall become part of the records of the Commission and shall be made available upon request to all interested parties.

"(2) Within one hundred and eighty days of a filing by the existing licensee of an initial application for a new licensee under subsection (a)(1) of this section, any citizen, association of citizens, domestic corporation, municipality, or State may submit for filing a competing application. Any competing application must include a detailed statement of how the plans reflected in the competing application are as well adapted, or better adapted, than are the plans reflected in the initial application to develop, conserve, and utilize in the public interest the water resources of the region. All maps, plans and specifications filed under this section shall become a part of the records of the Commission and shall be available upon request to all interested parties.

"(b)(1) Not less then one year prior to the expiration of the existing license, each applicant for the new license shall file a final application with the Commission. Such application shall refer to and seek to improve the application previously filed.

"(2) The Commission shall provide public notice upon receipt of final applications for a new license under subsection (b)(1) of this section. The Commission shall review all final applications for a new license simultaneously.

"(c)(1) If the United States does not, at the expiration of the existing license, exercise its right to take over any project or projects of the licensee, as provided in section 14, the Commission shall issue a new license to the applicant whose plans are best adapted to serve the public interest. If the Commission determines the plans of competing applicants are equally well adapted to serve the public interest, the Commission shall give preference according to the following bases:

"(A) If one of two applicants is a municipality or a State, and the other is not, the Commission shall favor the municipality or State; or

"(B) if both of two applicants are either a municipality or a State, or neither or them is a municipality or a State, the Commission shall favor the existing licensee.

"(2) New licenses shall be issued for a period not to exceed thirty years, unless the Commission determines a longer license term is necessary to best serve the public interest. The Commission shall not issue a new license unless it is satisfied that the applicant is able to carry out such plans.

"(3) In making a determination of the public interest under subsection (a)(1), the Commission shall consider—

"(A) the economic impact upon customers served by the existing licensee if it fails to receive a new license;

"(B) the ability of the existing licensee to provide efficient systems operation and reliable electric service to its customers if it fails to receive a new license;

"(C) the plans of each applicant to protect, mitigate and enhance fish and wildlife to the extent affected by the development and operation of the project or projects;

“(D) the plans of each applicant to implement energy efficiency programs to conserve the public resource; and

“(E)(i) the plans to each applicant to adapt its development and operation of the project or projects to a comprehensive plan for improving or developing a waterway or waterways prepared by the State in which the facility is or will be located, or if the facility is located on the Columbia River or its tributaries, by the Pacific Northwest Electric Power and Conservation Planning Council (established pursuant to the Pacific Northwest Electric Power Planning and Conservation Act (Public Law 96-501, 94 Stat. 2697)), or, if no such plan exists, (ii) the recommendations of Federal and State agencies and Indian tribes exercising administration over fish and wildlife, flood control, navigation, irrigation and recreation resources of the State in which the project or projects are located.

“(d) If the Commission issues a license to a new licensee, it shall be on the condition that the new licensee shall, before taking possession of such project or projects,

“(1) shall assume all contracts entered into by the licensee with the approval of the Commission;

"(2) pay the net investment of the licensee in the project or projects taken, not to exceed the fair market value of the property taken;

"(3) pay such reasonable damages, if any, to property of the licensee valuable, serviceable, and dependent as above set forth but not taken, as may be caused by the severance therefrom of property taken; and

"(4) pay 50 per centum of the additional cost to the existing licensee of providing the equivalent amount of the least-cost alternative electric energy to its customers for the term of the new license: *Provided*, That, notwithstanding any provision of State or Federal law, any payments received by the existing licensee under this subsection shall pass directly to the customers of the existing licensee.

"(e) The provisions of this subsection shall not apply to any project or projects for which an application of any entity—

"(1) whose application is pending before the Commission as of the date of enactment of this Act; and

"(2) whose application is for a license for a project or projects for which an existing license expires prior to January 1, 1989.".

(6) by renumbering section 15(b) (16 U.S.C. 808(b)) as section 15(f).

Senator WALLOP. Mr. Chairman, thank you.

I had anticipated being a witness, not a member of the committee today, but I do have a lengthy statement which I wish submitted for the record, and I have another statement which is——

Senator MURKOWSKI. It will be noted in the record.

Senator WALLOP [continuing]. Less lengthy but is still rather more than the opening statement. With your indulgence, I would like to give that.

Senator MURKOWSKI. I wonder if—Senator Hatfield is on a tight schedule. Would you care to——

Senator WALLOP. I would be happy to yield.

Senator HATFIELD. I will just put mine into the record, if I can submit my opening statement for the record, Mr. Chairman.

Senator MURKOWSKI. It is noted and will be part of the record.

[The prepared statement of Senator Hatfield follows:]

OPENING STATEMENT

OF

SENATOR MARK O. HATFIELD

JUNE 11, 1985

NO RESOURCE IS MORE PRECIOUS TO THIS NATION THAN WATER. ITS RIVERS AND LAKES MOVED AMERICANS ACROSS A CONTINENT, FLOATED THEIR COMMERCE TO MARKET, POWERED THE TURBINES OF AN INDUSTRIAL REVOLUTION, AND HELPED CREATE A RICHNESS OF LIVING UNDREAMED OF ELSEWHERE ON THIS GLOBE. WE ARE THE MOST FORTUNATE OF PEOPLE TODAY, IN PART, BECAUSE WE WERE BLESSED WITH AN ABUNDANCE OF THIS WONDERFUL RESOURCE AND BECAUSE WE HAVE CHOSEN TO USE IT WISELY TO BENEFIT ALL OF OUR CITIZENS.

IT IS THE REALIZATION OF THE IMPORTANCE OF THIS RESOURCE IN OUR PAST, AND IN OUR FUTURE, THAT UNDERLIES OUR EFFORTS HERE TODAY. IN THE NEXT TEN YEARS, 177 HYDROELECTRIC PROJECTS WILL COME UP FOR FEDERAL RELICENSING. THE FACT THAT FOUR MEMBERS OF THIS COMMITTEE HAVE INTRODUCED BILLS OFFERING SOLUTIONS AS TO HOW BEST TO ADDRESS THE RELICENSING QUESTION REFLECTS THE SERIOUSNESS OF THE ISSUE BEFORE US.

I HAVE COME HERE THIS MORNING, WITH AN OPEN MIND, TO PARTICIPATE IN AN EXPLORATION OF THE POTENTIAL PROBLEMS AND THEIR POSSIBLE SOLUTIONS. WHAT I HOPE WILL EMERGE FROM THIS HEARING IS A DECISION ABOUT WATER RESOURCE DEVELOPMENT AND CONSUMER NEEDS THAT WILL PROVE WISE IN THE JUDGMENT OF OUR CHILDREN. IT IS THEIR INHERITANCE THAT WE HAVE BEFORE US TODAY.

MR. CHAIRMAN, I COMMEND YOU FOR YOUR WILLINGNESS TO SCHEDULE A HEARING ON THIS IMPORTANT AND COMPLEX ISSUE.

STATEMENT OF HON. MALCOLM WALLOP, A U.S. SENATOR FROM THE STATE OF WYOMING

Senator Wallop. Mr. Chairman, mine is not really an opening statement, but a statement on behalf of my bill which we have called the Electric Consumers Protection Act of 1985.

I appreciate, Mr. Chairman, your having the hearings before your subcommittee today. Across the West, and indeed, across the Nation, the gold rush of the 1980's is underway. These fortune seekers are pursuing water and gradient to run electrical turbines because high energy costs have literally made hydro facilities worth their weight in gold.

When new sites are unavailable for development, municipal utilities are competing for hydro facilities coming up before FERC for license renewal, claiming a preference to the license on the basis of their status as a public entity. A decision in their favor by FERC would result in the transfer of a licensed facility to these utilities at a fraction of its value under the act's net investment and severance damage compensation test. Meanwhile, the ratepaying public, which struggled to build and pay for these projects over the years, is caught in the middle. If the municipality wins, they lose.

If Congress allows this power grab in the name of preference to continue, millions of ratepayers will almost certainly have to pay substantially higher utility rates for electricity. FERC license renewal doesn't equate to the transfer of a radio or a TV station where the new owner takes over the station and it continues to broadcast to the same listeners or the same viewers. If a FERC licensed facility is transferred in a relicensing proceeding, the power goes to a different service area. The customers do not go with it. In a license renewal proceeding, what we are talking about is the potential disruption of power in use.

If a utility doesn't get its license renewed and it can't meet its customers demands with surplus power from within its own system, either a new facility must be built or power will have to be purchased at the prevailing rate. Since many larger utilities use hydro for peaking power during periods of heavy demand to keep rates as low as possible and conserve more expensive fossil fuel, new facilities will mean new thermal plants since few hydro sites are left.

It strikes me, Mr. Chairman, as genuinely poor public policy to allow the wholesale transfer of valuable, fuel-free hydroelectric facilities from one entity to another solely on the basis of the type of ownership. What might have been good for the Nation in 1920 no longer applies today when these facilities have been built.

S. 426 provides a simple solution to the dilemma caused by conflicting FERC decisions handed down on the question of preference on relicensing by amending the Federal Power Act to clarify that preference does not apply in relicense proceedings. It also amends section 15 of the Federal Power Act to require FERC to consider within the context of section 10(a) of the act whether the existing licensee's plans are best adapted for the next license term. This makes sure that these plans fully comply with the public interest standards set forth in the act. The applicant with the best adapted plan gets the license. The bill also provides just compensation if ownership of a FERC licensed facility is tranferred because the license is not renewed. By this, one can rightfully conclude that S. 426 is no blank check to existing utilities. FERC still has the judgments which it can and must make. The blank check no longer exists in either direction.

The compensation provision in the statute falls short of reflecting the value of federally licensed fuel-free hydroelectric energy sources, and it is inequitable. Under the Federal Power Act, a FERC opinion indicates that municipal and State utilities must be paid just compensation if their facility is transferred in a relicensing proceeding. However, investor-owned utilities and private companies are stuck with the outmoded net investment test, two different tests for the same kind of power.

In my view, the ratepayers of investor-owned utilities who, by the way, are the majority of the citizens in this Nation, are entitled to the same compensation for their investment in hydropower as are the ratepayers being served by municipal or State utilities. This compensation is not pure profit which somehow ends up in the pockets of utility shareholders. State utility commissions set rates and authorize a fair rate of return for utilities. They also dedicate these utilities to public service to ensure that everyone living within a service area gets power. In reality, the issue of compensation upon the transfer of a licensed facility really boils down to how much it is going to cost the licensee losing the facility it built to replace that power it will need. Right now, the difference between the actual value of the plant and the takeover price under the net investment test is so great that the lower takeover price fosters competition for a license based solely on greed, not need.

In the *Merwin Dam* case, by FERC's own estimate the difference between the net investment test and replacement value, which is one way of determining just compensation, was astronomical. It would have cost the municipality a mere $9 million to take over the facility under the net investment test while it would have cost the utility $730 million to provide replacement power for its customers by building a thermal plant.

We are talking about homeowners. We are talking about businessmen, about industry, Government, and everyone else served by large, integrated, investor-owned systems whose licenses are due to expire by 1994 and beyond. I simply cannot see where it benefits the Nation to make these utilities and their ratepayers pay again for a new facility or replacement power simply because a competitor is seeking a profit at their expense. It is inflationary, it is inefficient and it is contrary to the national interest. Worse yet, it pits taxpayer against taxpayer with the blessing of a government committed to their common good.

We are at a point in our Nation's history where firm yields of power at low rates can mean the difference between survival or failure for farmers, for ranchers, the elderly, the poor, and marginal industries. Rural cooperatives, paper, aluminum and textile manufacturers all face the same risk of losing their projects if the courts find a municipal preference applies in relicensing. These entities have some 130 hydro licenses. Just compensation would ensure at least that challenges to these existing licenses as well as investor-owned utility licensee are based on need and ability to perform and not greed.

Mr. Chairman, while some claim that S. 426 discourages competition, I do not apologize for sponsoring a bill which encourages stability, helps keep utility rates low and keeps a dollar in a ratepayer's pocket that wouldn't otherwise be there if a facility which they built is transferred to a competitor at relicensing. If a municipal utility truly needs a hydro facility to serve its customers, it ought to be willing to pay its true value in order to get it. It isn't as if public bodies and municipalities are hydro poor. Right now public owned utilities have preferential access to or own over 68 percent of the projects in the United States while they serve but 13.6 percent of the public.

Before concluding, I would like to make one further important point. S. 426 is narrow in its focus on purpose. It does not get into issues such as preference on initial licensing, the debt repayment on federally marketed power, antitrust or mandatory wheeling. Such issues are simply too important and too complex to be dealt with in the issue of relicensing.

Preference on relicensing is a public policy issue. As such, it should be decided by Congress and not the courts. The issue should be decided based on what is the public interest today, not on what Congress had in mind 65 years ago. The stakes for that are simply too high. Over 175 projects owned by 48 regulated investor-owned utilities serving over 27½ million ratepayers will be up for relicensing by the mid-1990's, and more will follow. Projects range from Maine to Washington, from California to Georgia, and from Michigan to Alabama. On this subcommittee alone, Senators have 49 of these affected projects in their own States coming up by 1994. Appeals could keep the question of preference on relicensing in court for years, and the uncertainty and controversy which would reign in the interim would not only hurt ratepayers, but it would ultimately hurt the long-term economic viability of our country.

So S. 426 is supported by a wide diversity of groups including FERC Commissioners, Department of Energy, business, local, county, and State elected officials throughout the country, and 27 of my colleagues in the Senate who cosponsored this bill with me. We all recognize the danger of allowing a valuable, federally regulated asset to turn into a pot of gold for a privileged few. While I support and will continue strongly to support the municipal preference on initial licensing and on federally marketed power, preference on relicensing is where I draw the line. S. 426 would give electric consumers the fair share they need and deserve. On its behalf and on behalf of those electric consumers, I ask that you move this bill to markup quickly.

With your permission, now, I would put the whole statement that I had in the record.

Thank you, Mr. Chairman.

The CHAIRMAN. Your entire statement will be entered into the record.

[The prepared statement of Senator Wallop follows:]

TESTIMONY OF THE HONORABLE MALCOLM WALLOP
BEFORE THE SUBCOMMITTEE ON WATER AND POWER
SENATE ENERGY AND NATURAL RESOURCES COMMITTEE
ON S. 426

June 11, 1985

Mr. Chairman, thank you for giving me the opportunity to have the merits of S. 426, the Electric Consumers Protection Act of 1985, heard before this subcommittee today. Across the West, and indeed across the nation, the gold rush of the 1980's is underway. Today's fortune seekers are pursuing water and gradient to run electrical turbines because high energy costs have literally made hydro facilities worth their weight in gold.

When new sites are unavailable for development, municipal utilities are competing for hydro facilities coming up for FERC license renewal, claiming a preference to the license on the basis of their status as a public entity. A decision in their favor by FERC would result in the transfer of a licensed facility to these utilities at a fraction of its value under the Act's net investment and severance damage compensation test. Meanwhile, the rate paying public, which struggled to build and pay for these projects over the years, is caught in the middle. If the municipality wins, they lose.

If Congress allows this power grab in the name of preference to continue, millions of ratepayers will almost certainly have to pay substantially higher utility rates for electricity. FERC license renewal doesn't equate to the transfer of a radio or T.V. station where the new owner takes over the station and it continues to broadcast to the same listeners or viewers. If a FERC licensed facility is transferred in a relicense proceeding, the power goes to a different service area. The customers do not go with it. In a license renewal proceeding what we are talking about is the potential disruption of power in use.

If a utility doesn't get its license renewed and it can't meet its customers demands with surplus power from within its own system, either a new facility must be built, or power will have to be purchased at the prevailing rate. Since many larger utilities use hydro for peaking power during periods of heavy demand to keep rates as low as possible, and conserve more expensive fossil fuel, new facilities will mean thermal plants, since few hydro sites are left.

It strikes me as genuinely poor public policy to allow the wholesale transfer of valuable, fuel-free hydroelectric facilities from one entity to another solely on the basis of the type of ownership. What might have been good for the nation in 1920 no longer applies today.

S. 426 provides a simple solution to the dilemma caused by conflicting FERC decisions handed down on the question of preference on relicensing by amending the Federal Power Act to clarify that preference does not apply in relicense proceedings. It also amends Section 15 of the Federal Power Act to require FERC to consider within the context of Section 10(a) of the Act whether the existing licensee's plans are "best adapted" for the next license term. This makes sure that these plans fully comply with the public interest standards set forth in the Act. The applicant with the best adapted plan gets the license. The bill also provides "just compensation" if ownership of a FERC licensed facility is transferred because the license isn't renewed. By this one can rightfully conclude that S. 426 is no blank check to existing utilities. FERC still has judgments which it can and must make. The blank check no longer exists in either direction.

The compensation provision in the statute falls short of reflecting the value of federally licensed fuel-free hydroelectric energy sources, and it is inequitable. Under the Federal Power Act, a FERC opinion indicates that municipal and state utilities must be paid "just compensation" if their facility is transferred in a relicense proceeding. However, investor-owned utilities and private companies are stuck with the outmoded net investment test.

In my view the ratepayers of investor-owned utilities, who, by the way, are the majority of the citizens in this nation, are entitled to the same compensation for their investment in hydropower as are the ratepayers being served by municipal or state utilities. This compensation is not pure profit which somehow ends up in the pockets of utiltity shareholders. State Utility Commissions set rates and authorize a fair rate of return for utilities. They also dedicate these utilitites to public service to ensure that everyone living within a service area gets power. In reality, the issue of compensation upon the transfer of a licensed facility really boils down to how much it is going to cost the licensee losing the facility it built to replace that power. Right now the difference between the actual value of the plant and the takeover price under the net investment test is so great that the lower takeover price fosters competition for a license based on greed, not need.

In the Merwin Dam case by FERC's own estimate the difference between the net investment test and replacement value, which is one way of determining "just compensation", was astronomical. It would have cost the municipality only $9 million to take over the facility under the net investment test, while it would cost the utility $730 million to provide replacement power for its customers by building a thermal plant.

We are talking about homeowners, businessmen, industry, government, and everyone else served by large integrated investor-owned systems whose licenses are due to expire by 1994 and beyond. I simply can't see where it benefits the nation to make these utilities and their ratepayers pay again for a new facility or replacement power simply because a competitor is seeking a profit at their expense. It's inflationary, inefficient, and contrary to the national interest. Worse yet it pits taxpayer against taxpayer with the blessing of a government committed to the common good!

We are at a point in our nation's history where firm yields of power at low rates can mean the difference between survival or failure for farmers, ranchers, the elderly, the poor and marginal industries. Rural cooperatives, paper, aluminum and textile manufacturers all face the same risk of losing their projects if the courts find a municipal preference applies in relicensing. These entities have some 130 hydro licenses. "Just compensation" would ensure that challenges to these existing licenses as well as investor-owned utility licensee are based on need, and not greed.

Mr. Chairman, while some claim that S. 426 discourages competition, I don't apologize for sponsoring a bill which encourages stability, helps keep utility rates low and keeps a dollar in ratepayers pocket that wouldn't otherwise be there if a facility which they built is transferred to a competitor at relicensing. If a municipal utility truly needs a hydro facility to serve its customers, it ought to be willing to pay its true value in order to get it. It isn't as if states and municipalities are hydro poor. Right now state owned utilities have preferential access to or own over 68% of the projects in the United States, while they serve only 13.6 percent of the public.

Before concluding, I would like to make one more important point. S. 426 is narrow in its focus. It does not get into issues such as preference on initial licensing, the debt repayment on federally marketed power, antitrust, or mandatory wheeling. Such issues are simply too important and too complex to be dealt with in this bill.

Preference on relicensing is a public policy issue. As such it should be decided by Congress, and not the courts. The issue should be decided based on what is t e public interest today, not on what

Congress had in mind 65 years ago. The stakes are simply too high. Over 175 projects owned by 48 regulated investor-owned utilities serving over 27.5 million ratepayers will be up for relicensing by the mid 1990's. More will follow. These projects range from Maine to Washington, from California to Georgia, and from Michigan to Alabama. On this subcommittee alone Senators have 49 of these affected projects in their own states coming up by 1994. Appeals could keep the question of preference on relicensing in court for years, and the uncertainty and controversy which would reign in the interim would not only hurt ratepayers, but it would ultimately hurt the long term economic viability of the nation.

S. 426 is supported by a wide diversity of groups including FERC Commissioners, DOE, business, local, county and state elected officials throughout America, and twenty-seven of my colleagues in the Senate who co-sponsored this bill with me. We all recognize the danger of allowing a valuable federally regulated asset to turn into a pot of gold for a privileged few. While I support the municipal preference on initial licensing and on federally marketed power, preference on relicensing is where I draw the line. S. 426 would give electric consumers the fair share they need and deserve. On their behalf I ask that you move this bill to markup quickly. With your permission I will now place a more complete statement in the record and I would like to thank you for inviting me to testify.

Senator MURKOWSKI. I will now call on Senator Bennett Johnston, who is the author of Senate bill 403. I would remind my colleagues who have joined me that we have 33 witnesses today.

Senator FORD. Congratulations, Mr. Chairman.

Senator MURKOWSKI. In fairness to the position of the subcommittee chairman who is going to preside throughout the day, I would appreciate brevity if at all possible.

STATEMENT OF HON. J. BENNETT JOHNSTON, A U.S. SENATOR FROM THE STATE OF LOUISIANA

Senator JOHNSTON. Thank you, Mr. Chairman. I will be very brief.

Let me first of all adopt as my own, if I may, the words of Senator Wallop. His bill and mine are really not in competition, and certainly his statement and his reasons, well thought out and well delivered, are exactly on point, and I would like to put this whole thing in the context of one of cooperation rather than one of competition because I agree exactly with where he wants to go.

The differences are—the differences that we are dealing with here are very difficult legal problems, very subtle legal problems, but I think very important ones. Let me very briefly state what the difference between S. 403 and S. 426 is.

S. 426 would say that when a license expires anyone who would get that license under the test would have to pay just compensation in accordance with due process of law. Now that seems to have some meaning, but it is very difficult when you try to crack through to the core, to the nut of what that means, to decide what just compensation in accordance with due process of law means.

I believe that FERC or a court could very well decide that that means that you have no more rights than you would have under the present law. That is, 5th amendment or 14th amendment due process rights apply only to a taking by a State or the Federal Government, and when you have a license which by its terms has expired, there is really nothing to be taken because the whole value of a dam is encompassed in the right to operate that dam. If something more is meant than that, then it is not apparent from the wording of S. 426. We further think that S. 426 does not by its terms give any preference in the event of a tie.

So what we have done in S. 403, recognizing the very same need and the very same fact that existing customers should not be denied their power when you have a dam, when you have a whole system in place, we first of all create a test which I think encompasses four items. First, plans to develop the waterway; second, the impact on each applicant's customers; third, the ability to operate the project and fourth, the need of each applicant for project power to serve his customers.

Now if there is a tie, if the court or FERC could not decide which of the two applicants was better adapted to meet those tests, then under our bill S. 403 it would go to the existing licensee. In the event of a tie, the existing licensee keeps his license, but by considering such things as the impact on the applicant's customers and the need of the applicant for power, it seems to me we have a common sense test which can be understood and can be adequately determined in the public interest.

So Mr. Chairman, I want to work with Senator Wallop because we are headed in the same direction. It may be that we could use his bill and clear up the idea of what is just compensation. My further worry, though, I must tell you, is that even if we could craft a bill very carefully here to determine what we mean by just compensation, then I fear that when you would get to the conference committee, not having any preference at all in the Wallop bill, what you would do is simply water down the formula for just compensation so you would end up with half just compensation and no preference, and that would not be in the interests of ratepayers and the Nation.

So Mr. Chairman, I look forward to working with Senator Wallop and with you in this endeavor.

[The prepared statement of Senator Johnston follows:]

OPENING STATEMENT OF SENATOR JOHNSTON
HEARING ON HYDROELECTRIC RELICENSING

Mr. Chairman, today we examine the issue of hydroelectric relicensing. The issue is an important one. In the next ten years, the licenses for 168 hydroelectric projects will expire. These projects have a power capacity of approximately 3,000 megawatts, or roughly the equivalent of three nuclear plants. While that amount of power is not staggering in terms of the needs of the country as a whole, it is relatively concentrated among a limited number of utilities. for those utilities and their ratepayers that have projects with licenses expiring in the near future, the issue of whether low-cost hydropower will continue to be available is a serious one indeed.

I should note that there is a pressing need for legislation on this matter. As we are all aware, this matter involves the question of whether there should be a municipal preference in relicensing. At this very moment, however, that same question is before the D.C. Circuit in the Merwin case. Any day now, the Court could issue its decision. When it does, I hope that we are far along in our consideration of the bills before us because I fear that whichever way the decision goes, it will tend to sap the legislative momentum we are seeing today. It is always easier to sit back in response to a court decision--even a bad one--rather than make hard choices. It would be a shame if that happened in this instance. We have before us a fundamental question concerning our national policy on water resources. That question deserves to be decided by the Congress, not the courts.

Mr. Chairman, as I see it we must strike a balance in legislating on hydroelectric relicensing between the harm to consumers that will result from license transfers and the beneficial effects of competitive relicensing. On one hand, there is little question that existing licensee's who lose their licenses will almost always have to find replacement power. Generally, that replacement power is going to be thermally-generated with the end result that the ratepayers of the existing licensee will pay more for their power. At the same time, however, there is some evidence that competition in relicensing encourages applicants to make the best possible licensing proposals, thus ensuring that relicensed projects are truly in the public interest and not just the interest of the licensee.

Not surprisingly, I believe that the relicensing bill I have introduced, S.403, strikes the most reasonable balance between protecting the ratepayers of existing licensees and encouraging competition. My bill would award a new license to the applicant whose plans are best adapted to the public interest. In making this determination, the Federal Energy Regulatory Commission is directed to consider four factors:

(1) each applicant's plans to develop, conserve, and utilize the water resources of the region;

(2) the impact on each applicant's customers of failure to receive the license;

(3) the ability of each applicant to operate the project so as to provide efficient and reliable service; and

(4) the need of each applicant for electricity from the project to serve its existing customers. In situations where two relicensing applications are equally well adapted to serve the public interest, S.403 provides that a new license shall be issued to the existing licensee.

I should point out that the bill I have introduced does not encourage competition to the maximum extent possible. Rather, it would on balance favor existing licensees. I have structureed S.403 in this way because of my judgment that, while relicensing competition is important, the public interest is best served in this instance by legislation which would tend to avert the consumer impacts of license transfers.

Nevertheless, S.403 does not foreclose competition entirely. In particular, the bill would not change the compensation scheme provided under existing law. As we all know by now, the projects that are coming up for relicensing are generally worth far more than the compensation that must be paid for them under existing law. This disparity provides some incentive for new applicants to file competing applications with existing licensees. In circumstances where an existing licensee has been deficient in its administration of a project, the end result may well be license transfer.

I believe that maintaining the existing compensation scheme is superior to alternative approaches such as payment of just compensation. Since it is likely to be only deficient existing licensees that lose their projects under S.403, the payment of just compensation on project takeover would amount to a particularly undeserved windfall. Existing licensees have never had any basis for expecting to receive anything other than the measure of compensation provided for in the Federal Power Act. Furthermore, the calculation of just compensation is likely to pose an administrative burden and materially delay relicensing proceedings.

Mr. Chairman, I believe the approach I have taken in S.403 is a reasonable one, but I remain open to suggestions for improving my bill. I am glad that we are holding this hearing on hydroelectric relicensing, and I look forward to receiving the testimony of our witnesses.

Senator MURKOWSKI. Thank you very much, Senator Johnston.

We will next ask Senator Dan Evans, who is the author of S. 1260, to proceed with his opening statement at this time.

I might add, it is the latest version of hydroelectric licensing.

STATEMENT OF HON. DANIEL J. EVANS, A U.S. SENATOR FROM THE STATE OF WASHINGTON

Senator EVANS. Thank you, Mr. Chairman. I share much of what Senator Wallop and Senator Johnston have already said, and look upon the bills which have been introduced as variants on the same theme. I have attempted to, after spending a good deal of time analyzing the bills which have been introduced, bring some new elements into this discussion because what we are about to do, or at least the subject we are about to take on, has enormous consequences.

There are over a hundred projects which will come up for relicensing during the course of the next 10 years, and many more which will come up shortly after that. Hydro relicensing policy is an important issue to millions of ratepayers around the country, and especially important in my own State of Washington. Today, unfortunately, there is little unanimity in my State about how to resolve this complex issues. Some utilities would prefer to see legislation to clearly favor the existing licensee along the lines of the bill Senator Wallop has introduced. Other utilities express a strong desire to favor States and municipalities in the licensing process along the lines of the bill Senator Metzenbaum has introduced. And some utilities, particularly the publicly owned generating utilities in my State, would I think prefer to see no legislation at all.

This committee will hear from all three groups in today's testimony, and it is in that context that I introduce my bill on relicensing, S. 1260. The Federal Power Act of 1920 established a process to issue original licenses for a period of 50 years but left the criteria and language for granting a subsequent license unclear. Section 7(a) of the Federal Power Act provided preference to State and municipalities in granting the original license if the Commission determined that the applications were equally well adapted to serve the public interest.

In addition, it gave State and municipal applicants the right of last amendment, if the commission judged that its application was not equally well adapted to another. Clearly the emphasis in the 1920 Act was to provide every opportunity to a State or municipality to receive the license for a project. Proponents of the Act at that time were concerned about the potential for private electric utilities to monopolize our Nation's hydroelectric resources in perpetuity. The legislators drafted the 1920 Act to encourage a countervailing force of public power entities in our Nation's public power industry, and it certainly has worked.

Following the passage of the Act, public utility districts were established in all parts of the Nation to provide electric service to a broad range of customers at a low price. With a growing industry supported by the public preference clause, States and municipalities grew to account for about 75 percent of our Nation's hydroelectric power resources today.

The State of Washington in particular has been a major beneficiary of the development of public power. Today, public and private utilities supply roughly equivalent amounts of electric power to residential and commercial customers in Washington State. About 90 percent of that power generation is through hydroelectric energy.

Mr. Chairman, current law is vague regarding the relicensing criteria and guidelines. If legislative alternatives by this committee are to be considered prior to the definitive ruling by the courts, I believe that a full range of options ought to be considered. My bill attempts to explore new ground and to clarify some of the ambiguities in current law. It provides fairness to the existing licensees, ratepayers, as well as an opportunity for a competing applicant to file for a new license under well defined guidelines.

The bill establishes a process that should dramatically reduce the likelihood of a tie, that is, that two competing plans are equally well adapted. The compensation criteria are not so high as to discourage competition but will adequately compensate a displaced licensee's ratepayers.

The methodology will also encourage utilities who benefit from inexpensive hydroelectric power today, to look more seriously at the development of least cost alternative sources. There is no mysterious magic to the 50 percent of least-cost alternatives that I have suggested as compensation in my bill, but I believe it represents a reasonable middle ground between the extremes of net depreciated investment and replacement values.

I am willing and open, however, to receive suggestings regarding a better approach.

In summary, I believe that the relicensing should be considered primarily as a ratepayer issue, as the Chairman has mentioned, as well as a means to ensure fair and optimal utilization of a public resource. If a utility believes that it can best represent its ratepayers by competing for the new license and meet the public interest criteria specified in the bill, it will pursue the license. If it believes it cannot do so, it will not.

In my view, this approach will lead to the optimum utilization and enhancement of our Nation's valuable hydroelectric resource.

Mr. Chairman, let me add just two very brief subnotes. In the introduction of the bill there were two typographical errors which should be noted for those who are looking at the bill. On page 4, line 14, it says subsection (a)(1). That should be (c)(1). And on page 6, line 21, at the end of the line where it says "and', that should be stricken and the word "or" inserted.

Senator EVANS. I understand that since the bill was introduced just recently that many of those who will testify today may not have had an opportunity to fully examine it. I encourage them to use the 2 weeks which I understand will be available after the hearing or some similar period of time to add to the record, and I encourage those who will testify today to do just that.

Thank you, Mr. Chairman.

[The prepared statement of Senator Evans follows:]

SENATOR DANIEL J. EVANS
HEARINGS ON HYDROELECTRIC RELICENSING
SUBCOMMITTEE ON WATER AND POWER,
SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES

June 11, 1985

Hydroelectric relicensing policy is an important issue to the millions of ratepayers around the country. It is especially important in my state of Washington. Today, unfortunately, there is little unanimity in my state about how to resolve this complex issue. Some utilities would prefer to see legislation clearly favor the existing licensee, along the lines of the Shelby-Wallop bill. Other utilities express a strong desire to favor states and municipalities in the licensing process, along the lines of the Metzenbaum-Matsui bill. And some utilities would prefer to see no legislation at all. This committee will hear from all three groups in today's testimony. And it is in that context that I introduced my bill on relicensing on June 7, last Friday -- S. 1260.

The Federal Power Act of 1920 established a process to issue original licenses for a period of 50 years, but left the criteria and language for granting a subsequent license unclear. Section 7 (a) of the Federal Power Act provided preference to states and municipalities in granting the original license, if the Commission determined that the applications were equally well adapted to serve the public interest. In addition, it gave state and municipal applicants the right of last amendment if the Commission judged that its application was not equally well adapted to another. Clearly, the emphasis in the 1920 act was to provide every opportunity to a state or municipality to receive the license for the project. Proponents of the act at that time were concerned about the potential for private electric utilities to monopolize our nation's hydroelectric resources in perpetuity.

The legislators drafted the 1920 act to encourage a countervailing force of public power entities in our electric power industry. And it worked. Following the passage of the act, public utility districts were established in all parts of the Nation to provide electric service to a broad range of customers at a low price. With a growing industry supported by the public preference clause, states and municipalities grew to account for about 75% percent of our Nation's hydroelectric power resources today.

The State of Washington in particular has been a major beneficiary of the development of public power. Today, public and private utilities supply roughly equivalent amounts of electric power to residential and commercial customers in Washington State. About 90 percent of the power generation in our State is hydroelectricity.

Mr. Chairman, current law is vague regarding the relicensing criteria and guidelines. If legislative alternatives by this committee are to be considered prior to definitive rulings by the courts, I believe that a full range of options should be considered. My bill attempts to explore new ground and clarify some of the ambiguities in current law. It provides fairness to the existing licensee's ratepayers as well as an opportunity for a competing applicant to file for the new license under well-defined guidelines.

The bill establishes a process that should dramatically reduce the likelihood of a tie, between two competing plans that are equally well adapted. The compensation criteria are not so high as to discourage competition, but will adequately compensate a displaced licensee's ratepayers. My methodology will also encourage utilities who benefit from inexpensive hydropower today to look more seriously at development of least-cost alternative sources. There is no mysterious magic to the 50 percent of least-cost alternative that I have suggested in my bill, but I believe it represents a reasonable middle ground between the extremes of net depreciated investment and replacement value. I am willing and open, however, to receive suggestions regarding a better approach.

In summary, I believe that the relicensing should be considered primarily as a ratepayer issue as well as a means to ensure fair and optimal utilization of a public resources. If a utility believes that it can best represent its ratepayers by competing for the new license, and meet the public interest criteria specified in the bill, it will pursue the license. If it believes it cannot do so, it will not. In my view, this approach will lead to the optimum utilization and enhancement of our Nation's valuable hydroelectric resources.

NEWS From Senator Dan Evans

702 Hart Senate Office Building
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Date: June 7, 1985

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FOR IMMEDIATE RELEASE

EVANS INTRODUCES FRESH APPROACH TO DAM RELICENSING

Legislation to provide new guidelines and criteria for the relicensing of hydroelectric power projects was introduced today by U.S. Senator Daniel J. Evans (R-WA).

The bill which would amend the Federal Power act of 1920 includes guidelines for the submittal and review of applications by the Federal Energy Regulatory Commission (FERC), and criteria for adequate compensation of a utility's ratepayers in the event a license is transferred.

In the state of Washington, most of the dam sites on the Columbia River have been developed by the federal government and are operated through the Bonneville Power Administration. "These federal facilities currently run at a capacity of about 21,000 megawatts," Evans said. "However, there are numerous non-federal dams in the state which are licensed to either public or private utilities. Public utilities have licenses at 15 major dams representing 7,000 megawatts of hydropower capacity. Private utilities have licenses at six major facilities amounting to approximately 750 megawatts.

"I believe the relicensing issue is primarily a ratepayer issue, not an issue of preference for public or private utilities," Evans said. "At the outset, this legislation does not favor one group of ratepayers over any other in any of its criteria."

Evans summarized the goals and underlying assumptions of the bill. "First, it attempts to minimize the economic disruption to ratepayers during a relicensing procedure. Second, it provides an open and fair process for different utilities to compete for a license. Since hydropower is a public resource, we should encourage substantial benefits and improvements through fair competition," he explained. "Third, the bill sets out a well-defined framework for the process of submitting and reviewing applications in both adversarial and non-adversarial proceedings."

(more)

Evans' concern for the best interests of the ratepayer is well established in the bill. "Criteria which define 'the public interest' have been modified to reflect, as broadly as possible, today's needs," he said.

These include such considerations as the economic impact on customers if an existing licensee fails to receive a new license; the ability of the existing licenseholder to provide efficient and reliable electric service to its customers if it fails to receive a new license; plans of each applicant to protect, mitigate and enhance fish and wildlife; plans to implement energy conservation programs; and plans to adapt development and operation of a project to any comprehensive plan for improving or developing waterways.

The bill establishes new procedures intended to reduce the chance of two applications being tied. These include a requirement that the final bid of each applicant be submitted simultaneously. However, if the commission (FERC) determines that the plans of competing applicants serve the public interest equally, Evans' bill provides for preference to be given to a public over a private utility. If both applicants in a tie are public utilities or both are private utilities, preference would be given to the existing licenseholder. This is consistent with provisions in the current regulations.

Evans' bill provides relicensing for a period of 30 years compared to the original license period of 50 years. It also includes a new method of compensation if a license is transferred from one utility to another.

"The bill attempts to strike a balance between the extreme positions of public and private utilities today," he said. "It would compensate the current licenseholder on the basis of the least costly alternative energy source available to it."

A grandfather clause would cover any application pending before FERC as of the date of the enactment of the bill and any application for a license for a project where the existing license expires prior to January 1, 1989. "The grandfather clause would apply to 11 projects nationally," Evans said. "Two of those are in Washington -- Merwin Dam and Seattle City Light's Skagit River dams."

He added, "I believe this bill will force utilities to consider relicensing primarily as an economic issue. If a utility believes that it can best represent its ratepayers by competing for a new license and can meet the public interest criteria specified in the bill, then it will pursue the license. If a utility does not believe it can do this, then I don't think it would pursue a new license. Ultimately, this will lead to the optimum utilization and enhancement of our nation's valuable hydroelectric resources."

Evans' legislation has been referred to the Senate Energy and Natural Resources Committee. Hearings on hydro relicensing bills have been scheduled for Tuesday, June 11 before the Subcommittee on Water and Power.

Senator **Murkowski**. Thank you, Senator Evans.

Senator Metzenbaum is the author of S. 1219.

Senator Metzenbaum.

STATEMENT OF HON. HOWARD M. METZENBAUM, A U.S. SENATOR FROM THE STATE OF OHIO

Senator **Metzenbaum**. Mr. Chairman, I look forward to hearings on this very complicated and emotional issue. It is not an easy issue, and all one has to do is to look at the list of witnesses that we have today, and one knows that there are a host of of different points of view, and they come at the issue from various and sundry positions.

To me there is one unalterable economic fact. The consumer benefits most when there is unbridled competition. Thus, on this matter, the issue is not public power against private power, the issue is competition: what policy will result in the most competition for development of Federal water resources. Fifty years ago the Federal Government awarded licenses to operate hydroelectric facilities. Now many of these licensees are here asserting a right to retain these licenses. They have a vested interest in maintaining the status quo.

As I see it, no one has a right to these licenses. These are public resources. Neither by inference nor innuendo nor by the language of the statute was any such right created. Therefore, I believe they should be awarded after a thorough competition to find the most qualified applicant.

I will oppose with all my energy any bill that insulates people from the forces of competition, whether overtly or through some supposedly objective criteria that actually tilts the deck one way or the other. I believe the legislation I have introduced, S. 1219, will achieve the objective of promoting vigorous competition for Federal hydroelectric licenses. It strikes a reasonable balance between IOU's seeking to repeal the 65-year-old preference and consumer-owned utilities who want to preserve the status quo.

I recognize that this is a divisive issue. I believe these hearings are an important step toward fashioning a consensus bill, and I stand ready to participate in any effort to reach a fair compromise that promotes competition without unfairly penalizing any interest.

And I look forward to working with you, Mr. Chairman, and the other members of this committee who have legislated and in the introduction indicated their concern about this issue and subject.

Senator **Murkowski**. Thank you, Senator Metzenbaum.

Senator Nickles.

Senator **Nickles**. Mr. Chairman, I don't have an opening comment except to say that I'm glad you're chairman of the subcommittee today. [Laughter.]

Instead of this past chairman.

I do look forward to the hearings and hopefully we will be able to come up with a resolution to a very difficult and complicated issue.

Senator **Murkowski**. Thank you very much.

I don't think you are aware of it, Senator Nickles, but Russ Brown has arranged for 33 witnesses to appear, so we do have a number of our colleagues here, some of them who are out in the gallery.

I am sorry, I have lost track of the appearance of my colleagues on the Democratic side, so Jeff?

Senator BINGAMAN. I have no statement. I am not a member of this subcommittee, but I appreciate the chance to sit in and listen to some of the testimony.

Senator MURKOWSKI. Wendell, do you have a statement?

Senator FORD. I yield back my time.

Senator MURKOWSKI. John.

STATEMENT OF HON. JOHN MELCHER, A U.S. SENATOR FROM THE STATE OF MONTANA

Senator MELCHER. Mr. Chairman, conceivably as the law now stands on relicensing, carpetbaggers could come in from outside the area to pick up a facility and get the license and then decide what to do with the power. That conceivably could happen under present law. I wouldn't be very fond of that happening.

There is a second point on relicensing, that has to be safeguarded, that is, that we don't create a lousy situation to exist or create into existence a definite windfall for those getting the relicensing.

The third point, and perhaps the most significant for this committee is that any bill that we pass cannot violate the opportunity for REA's and public power to be able to compete and at least be able to come out in as good a position as they are now. To weaken their position simply cannot be tolerated.

Now I am ready to hear from the witnesses although I will have to be over in the Agriculture Committee on a markup a good share of the time. I will make a point to review the testimony of the witnesses as presented to this subcommittee.

Thank you, Mr. Chairman.

Senator MURKOWSKI. Thank you very much, Senator Melcher.

We will proceed now with the Senators who are with us today, Senator Wilson from the State of California has a statement to make on behalf of this position; Senator Jerry Denton is joining us, and Senator Heflin will submit a statement for the record.

I believe Senator Cranston may appear.

I would like to enter into the record a statement by the Chairman of the Energy Committee.

[The prepared statements of Senator McClure, Senator Heflin, and Congressman Pashayan follow:]

STATEMENT BY SENATOR MCCLURE

I WANT TO THANK SENATOR MURKOWSKI FOR SCHEDULING THIS HEARING BEFORE HIS SUBCOMMITTEE ON WATER AND POWER. IT IS TIMELY THAT THE COMMITTEE AND THE CONGRESS ADDRESS THE QUESTIONS SURROUNDING THE RELICENSING OF HYDROELECTRIC PROJECTS BY THE FEDERAL ENERGY REGULATORY COMMISSION.

AS MY COLLEAGUES ARE WELL AWARE, THE AUTHORS OF THE FEDERAL WATER POWER ACT - LATER TO BECOME THE FEDERAL POWER ACT DREW HEAVILY ON THE WISDOM OF PRESIDENT THEODORE ROOSEVELT AS EXPRESSED EARLY IN THIS CENTURY. AT THAT TIME, PRESIDENT ROOSEVELT WAS CONCERNED THAT THE HYDROELECTRIC RESOURCES OF THE NATION WERE BEING REMOVED FROM THE PURVIEW AND CONTROL OF OUR CITIZENS.

IN HIS APRIL 13, 1903 MESSAGE TO THE CONGRESS EXPLAINING HIS VETO OF THE RAINY RIVER BILL, HE STRESSED THE NEED TO PROVIDE A FINITE TIME FOR THE GRANTING OF A LICENSE OR PRIVILEGE FOR THE USE OF OUR NATION'S WATERWAYS FOR THE PRODUCTION OF HYDROELECTRIC POWER. THAT CONCEPT IS EMBODIED IN THE FEDERAL POWER ACT. BUT PRESIDENT ROOSEVELT ALSO STRESSED THAT FUTURE GENERATIONS MUST BE LEFT WITH THE POWER OR AUTHORITY TO RENEW OR EXTEND SUCH PRIVILEGES IN ACCORDANCE WITH THE CONDITONS WHICH MAY PREVAIL AT THAT TIME.

IT HAS NOW BEEN SOME 65 YEARS SINCE PASSAGE OF THE FEDERAL WATER POWER ACT OF 1920. BY AND LARGE, IT IS MY FIRM BELIEF THAT THIS BODY OF LAW HAS SERVED THE PUBLIC INTEREST WELL IN ENCOURAGING THE DEVELOPMENT OF OUR NATION'S HYDROELECTRIC RESOURCES. BUT IT HAS BEEN LEFT TO US--AS AN ACCIDENT OF HISTORY OR THE FATE OF SIMPLE TIMING--TO ADDRESS THE QUESTIONS SURROUNDING THE RELICENSING OF HYDROELECTRIC PROJECTS.

PRESIDENT ROOSEVELT SAID "FUTURE GENERATIONS" AND I WOULD POINT OUT TO MY COLLEAGUES THAT WE ARE THAT FUTURE GENERATION.

PRESIDENT ROOSEVELT ALSO CALLED UPON US TO CONSIDER THE "CONDITIONS WHICH MAY PREVAIL AT THAT TIME." INDEED, TIMES HAVE CHANGED. WE ARE NO LONGER CALLED UPON TO CONSIDER ISOLATED PROJECTS WHICH SIMPLY SERVE LOCAL COMMUNITIES. MANY OF THE PROJECTS WHICH ARE LICENSED PURSUANT TO THE FEDERAL POWER ACT ARE PART OF REGIONAL OR STATEWIDE SYSTEMS WHOSE CUSTOMERS MAY NUMBER IN THE MILLIONS. NOWADAYS, ELECTRICITY IS A NATIONAL RESOURCE AND MAY BE SHIPPED THOUSANDS OF MILES TO SERVE THE NEEDS OF INDUSTRY AND HOMES.

THE REGULATORY CLIMATE HAS ALSO CHANGED OVER TIME. THE FEDERAL POWER ACT SPEAKS TO A FUTURE WHEN A STATE SHALL HAVE PROVIDED A COMMISSION OR OTHER AUTHORITY FOR THE REGULATION AND CONTROL OF THE ELECTRIC UTILITY INDUSTRY. THAT TIME HAS LONG SINCE ARRIVED AND WE HAVE IN EVERY STATE A DULY CONSTITUTED BODY CAPABLE OF UTILITY OVERSIGHT.

WE HAVE AN OBLIGATION TO ENCOURAGE THE PRUDENT AND CONTINUED DEVELOPMENT OF OUR RESOURCES. BUT WE ALSO HAVE A DIRECT OBLIGATION ON BEHALF OF THE RATE PAYER -- PARTICULARLY THE FAMILY WITH THE METER ON THE SIDE OF THE HOUSE AT THE END OF THE LINE. ALL SIDES ON THE ISSUE OF RELICENSING PROFESS TO SPEAK ON BEHALF OF THE CONSUMER. BUT I AM A LITTLE DISMAYED THAT NO ONE HAS ADMITTED THAT ALMOST ANY PATH THAT WE MAY FOLLOW IN THE RELICENSING ISSUE -- WHETHER LEAVING THINGS UP TO THE FERC UNDER CURRENT LAW OR INVOKING DRASTIC CHANGES-- WILL ULTIMATELY COST THE RATEPAYER MORE.

WHAT I INTEND TO SEEK IS THE PATH THAT WILL PROVIDE THE LOWEST RATES TO THE CONSUMER WHILE ENSURING RELIABLE SERVICE AND RESPONSIBLE DEVELOPMENT OF THE RESOURCE. IT WOULD BE FOOLISH TO BECOME EMBROILED IN THE DECADES OLD CONTROVERSEY BETWEEN PUBLIC AND PRIVATE POWER INTERESTS TO THE DETRIMENT OF THE CONSUMER. IT WOULD BE FOOLISH TO DENY THE GOOD STEWARDSHIP

OF AN EXISTING LICENSEE--WHETHER PUBLIC OR PRIVATE--IN GRANTING A NEW LICENSE. IT WOULD BE FOOLISH TO PROMOTE A "BIDDING WAR" BETWEEN APPLICANTS BASED UPON ENVIRONMENTAL OR OTHER GROUNDS WHICH, OF THEMSELVES MAY HAVE MERIT, BUT ARE IN FACT A RAID ON THE RESOURCES OF THE RATEPAYER.

WHILE I DO HAVE MY PERSONAL INCLINATIONS AS TO HOW THE ISSUES SURROUNDING THE RELICENSING QUESTION SHOULD BE RESOLVED, I LOOK FORWARD TO REVIEWING THE RECORD OF THIS HEARING BEFORE MAKING ANY FINAL JUDGEMENT.

I WANT TO COMMEND THE CHAIRMAN OF THE SUBCOMMITTEE FOR HIS PERSONAL INTEREST IN THIS ISSUE. I AM LOOKING FORWARD TO WORKING CLOSELY WITH HIM IN RESOLVING THESE ISSUES AND REPORTING LEGISLATION FROM THE COMMITTEE.

TESTIMONY
OF
U.S. SENATOR HOWELL HEFLIN

S.426

THE "ELECTRIC CONSUMERS PROTECTION ACT OF 1985

BEFORE THE
SUBCOMMITTEE ON WATER AND POWER
U. S. SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES

TUESDAY, JUNE 11, 1985
SD-366

STATEMENT OF
HOWELL HEFLIN

MR. PRESIDENT, I AM HERE TODAY TO VOICE MY SUPPORT FOR S.426, THE "ELECTRIC CONSUMERS PROTECTION ACT OF 1985. IT WAS INTRODUCED BY MY DISTINGUISHED COLLEAGUE AND GOOD FRIEND, SENATOR WALLOP OF WYOMING. IT IS MY UNDERSTANDING THAT, TO DATE, THIS IMPORTANT LEGISLATION HAS BEEN COSPONSORED BY APPROXIMATELY 27 OTHER MEMBERS OF THE SENATE.

AS YOU ARE WELL AWARE, MR. CHAIRMAN, I AM AN ORIGINAL COSPONSOR OF S.426. I WHOLEHEARTEDLY SUPPORT THIS LEGISLATION BECAUSE, IF ENACTED, IT WOULD BENEFIT MILLIONS OF ELECTRIC POWER CONSUMERS WHOSE ELECTRIC SERVICE IS SUPPLIED, IN SUBSTANTIAL PART, FROM HYDROELECTRIC PROJECTS LICENSED UNDER THE TERMS OF THE FEDERAL POWER ACT (FPA).

MR. CHAIRMAN, PASSAGE OF THIS LEGISLATION IS NECESSARY TO OVERCOME THE CONFUSION WHICH HAS ARISEN WITH RESPECT TO THE INTERPRETATION AND ADMINISTRATION OF CERTAIN PROVISIONS OF THE FEDERAL POWER ACT. EVEN TODAY, LITIGATION IS PENDING BEFORE THE U. S. COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT, IN WHICH THE MEANING OF SUCH PROVISIONS

IS BEING CONTESTED. THE PIVOTAL CONTROVERSY TURNS ON WHETHER THE FEDERAL POWER ACT STIPULATES A PREFERENCE FOR MUNICIPAL ELECTRIC SYSTEMS AND OTHER STATE BODIES IN THE RELICENSING OF HYDROELECTRIC PROJECTS.

REPRESENTATIONS WERE MADE TO CONGRESS IN 1968 BY THE FEDERAL POWER COMMISSSION (PREDECESSOR TO THE FEDERAL ENERGY REGULATORY COMMISSION (FERC), TO THE EFFECT THAT NO SUCH PREFERENCE WAS APPLICABLE AGAINST AN EXISTING LICENSEE ATTEMPTING TO RELICENSE ITS PROJECT. IN 1980, HOWEVER, FERC REVERSED ITS EARLIER POSITION ON THIS SUBJECT, HOLDING THAT SUCH A PREFERENCE WOULD APPLY. IN 1983, FERC AGAIN CHANGED ITS POSITION AND HELD THAT SUCH A PREFERENCE WOULD NOT APPLY AT RELICENSING. THAT DETERMINATION IS NOW PENDING BEFORE THE U. S. COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT IN A CASE INVOLVING THE RELICENSING OF THE MERWIN PROJECT OF PACIFIC POWER AND LIGHT COMPANY, HEADQUARTERED IN PORTLAND, OREGON.

NUMEROUS HYDROELECTRIC PROJECTS, MOST OF WHICH ARE DEVOTED TO PUBLIC SERVICE, WILL BE SUBJECT TO RELICENSING PROCEEDINGS OVER THE NEXT FEW YEARS. THE OWNERS OF THESE PROJECTS NEED TO KNOW WHETHER THEY WILL BE AVAILABLE AS PLANS ARE MADE TO MEET FUTURE ELECTRIC POWER NEEDS.

ELECTRIC POWER SUPPLY PLANNING IS COMPLEX, AT BEST, FOR A NUMBER OF REASONS, PARTICULARLY GIVEN THE LONG LEAD TIME REQUIRED IN OBTAINING A PERMIT FOR, AND THE CONSTRUCTION OF ELECTRIC GENERATING PLANTS.

MR. CHAIRMAN, MY HOME STATE, ALABAMA, IS BLESSED WITH A NUMBER OF IMPORTANT RIVER SYSTEMS WHICH LEND THEMSELVES TO WORTHWHILE DEVELOPMENT. THE NORTHERN PART OF ALABAMA IS TRAVERSED BY THE TENNESSEE RIVER, WHICH HAS BEEN DEVELOPED BY THE TENNESSEE VALLEY AUTHORITY (TVA). TVA SERVES 13 COUNTIES IN NORTH ALABAMA, PRACTICALLY ALL OF THE STATE OF TENNESSEE, AND SUBSTANTIAL PARTS OF MISSISSIPPI, KENTUCKY, GEORGIA, AND NORTH CAROLINA. THE HYDROELECTRIC PROJECTS DEVELOPED BY TVA, AS WELL AS THOSE DEVELOPED BY THE CORPS OF ENGINEERS IN THE TVA SERVICE AREA, ARE NOT AFFECTED BY THE PROVISIONS OF THE FEDERAL POWER ACT. THUS, NONE OF THE HYDROPOWER UTILIZED BY TVA IS INVOLVED IN THE RELICENSING CONTROVERSY TO WHICH I HAVE REFERRED. S.426 DOES NOT AFFECT, IN ANY FASHION, ANY OPPORTUNITIES OF THE HUNDREDS OF MUNICIPAL OR ELECTRIC COOPERATIVE SYSTEMS LOCATED IN THE TVA SERVICE AREA IN THEIR ACCESS OR PREFERENCE, WITH RESPECT TO ELECTRIC POWER SUPPLIED THROUGH THE TVA SYSTEM.

HOWEVER, MORE THAN A MILLION ELECTRIC CONSUMERS IN MY STATE WHO ARE SERVED BY ALABAMA POWER COMPANY COULD BE

AFFECTED BY THE RELICENSING OF HYDROELECTRIC PROJECTS WHICH ARE NOW OWNED BY THAT COMPANY, AND WHICH ARE DEVOTED TO SERVING THE ELECTRIC POWER REQUIREMENTS OF THOSE CONSUMERS. THERE ARE 14 HYDROELECTRIC PROJECTS LICENSED TO ALABAMA POWER COMPANY, LOCATED ON THE COOSA, TALLAPOOSA, AND WARRIOR RIVERS. THESE PROJECTS HAVE BEEN DEVELOPED WITH GREAT IMAGINATION AND INNOVATION. THEY PROVIDE ENORMOUS BENEFITS TO THE PEOPLE IN MY STATE, NOT ONLY BY PROVIDING THE LOWEST COST SOURCE OF ELECTRIC ENERGY TO ELECTRIC CONSUMERS, BUT ALSO BY PROVIDING AN AID TO NAVIGATION, A SUBSTANTIAL MEASURE OF FLOOD CONTROL, AND A SOURCE OF RECREATIONAL BENEFITS TO LITERALLY THOUSANDS OF MEMBERS OF THE PUBLIC WHO ENJOY THE RESERVOIRS CREATED BY THESE PROJECTS FOR FISHING, BOATING, AND OTHER RECREATIONAL PURSUITS. BECAUSE THEY ARE PART OF THE INTEGRATED ELECTRIC SYSTEM OF ALABAMA POWER COMPANY, WHICH SERVES MORE THAN ONE MILLION HOUSEHOLDS, BUSINESSES AND INDUSTRIES THROUGHOUT ALABAMA, THE BENEFITS OF THESE HYDROELECTRIC PROJECTS ARE SPREAD WIDELY AMONG MANY CITIZENS OF MY STATE, INCLUDING THOSE SERVED BY MUNICIPAL ELECTRIC SYSTEMS THAT TAKE WHOLESALE POWER FROM ALABAMA POWER COMPANY.

IT IS MY UNDERSTANDING THAT THROUGH THE ACCOUNTING AND RATEMAKING PROCEDURES APPLIED BY FERC AND THE ALABAMA PUBLIC SERVICE COMMISSION, THE INVESTMENT BY ALABAMA POWER COMPANY

IN THESE PROJECTS HAS BEEN AMORTIZED, IN LARGE PART, BY THE CONSUMERS. THIS IS SO, I UNDERSTAND, BECAUSE THE RATES THEY PAY FOR ELECTRIC POWER ARE SET AT LEVELS WHICH COVER THE DEPRECIATION CHARGES USED IN THE AMORTIZATION PROCESS. AS THESE PROJECTS ARE OPERATED YEAR AFTER YEAR, AND AS THE DEPRECIATION CHARGES ARE ACCRUED, THE DOLLAR AMOUNT OF THESE PROJECTS, IN THE RATE BASE OF ALABAMA POWER COMPANY, BECOMES DIMINISHED. AS THIS DIMINUTION OCCURS, THE REQUIREMENT FOR CONSUMERS TO PAY A RETURN ON THE INVESTMENT IN THESE PROJECTS THROUGH THE RATEMAKING PROCESS DECLINES, COSTING RATEPAYERS LESS AND LESS. ACCORDINGLY, AS THE LICENSE TERM FOR THESE PROJECTS EXPIRES, THE PROJECTS BECOME MORE AND MORE VALUABLE TO THE RATEPAYERS. AS A MATTER OF EQUITY, SINCE THESE CONSUMERS, IN AN ECONOMIC SENSE, HAVE PAID FOR THE PROJECTS, THEY SHOULD CONTINUE TO RECEIVE THE LOW COST POWER FROM THESE PROEJCTS. THESE PROJECTS REQUIRE NO FUELS SUCH AS GAS, OIL, COAL, OR NUCLEAR, BUT ARE POWERED BY A HEAD OF WATER CREATED BY THE DAMS AND IMPOUNDMENTS. THEREFORE, THE COST OF ENERGY FROM THESE PROJECTS IS A FRACTION OF THE COST FROM OTHER GENERATING SOURCES WHICH DO REQUIRE FUEL.

IN MY JUDGMENT, MR. CHAIRMAN, IT IS NOT A GOOD POLICY REASON TO SUPPORT A TRANSFER OF THESE PROJECTS TO MUNICIPAL SYSTEMS AND THEIR CONSUMERS SIMPLY BECAUSE A LICENSE TERM

EXPIRES AND A NEW LICENSE FOR AN ADDITIONAL TERM IS TO BE ISSUED. S.426 DECLARES SOUND LEGISLATIVE POLICY IN MAKING CLEAR THAT EXISTING LICENSEES SHALL HAVE A FAIR OPPORTUNITY TO RETAIN THESE PROJECTS FOR THEIR CUSTOMERS, ASSUMING THEY WILL CONTINUE TO OPERATE THESE PROJECTS IN THE PUBLIC INTEREST AND IN ACCORDANCE WITH THE "BEST ADAPTED" STANDARD SET OUT IN SECTION 10(A) OF THE FEDERAL POWER ACT.

WHILE I BELIEVE THAT THE RELICENSING STANDARDS SET FORTH IN S.426 WOULD RESULT IN THE PROJECTS IN MY STATE BEING RELICENSED TO THE EXISTING LICENSEE, I, NEVERTHELESS, BELIEVE THAT THE COMPENSATION PROVISIONS IN S.426 ARE NECESSARY TO PROTECT THE CONSUMERS' INTEREST, SHOULD A PROJECT BE TAKEN AWAY FROM AN EXISTING LICENSEE AND ITS CUSTOMERS THROUGH THE RELICENSING PROCESS. AS I HAVE ALREADY INDICATED, THESE PROJECTS HAVE BEEN PAID FOR BY THE EXISTING LICENSEE AND THEIR CUSTOMERS. SHOULD THESE PROJECTS BE TAKEN AWAY, THEY SHOULD BE JUSTLY COMPENSATED.

SOME HAVE QUESTIONED THE USE OF THE TERM "JUST COMPENSATION" IN S.426. I HAVE NO DIFFICULTY WITH THIS TERM. DURING MY MORE THAN TWENTY-FIVE YEARS IN THE PRIVATE PRACTICE OF LAW AND, LATER, DURING MY SIX-YEAR TERM OF OFFICE AS CHIEF JUSTICE OF THE ALABAMA SUPREME COURT, I HAD MANY, MANY OCCASIONS TO APPLY THE CONCEPT OF JUST

COMPENSATION IN EMINENT DOMAIN CASES, WHICH INVOLVED THE TAKING OF PRIVATE PROPERTY FOR PUBLIC USE. THIS TERM DERIVES FROM THE FIFTH AMENDMENT TO THE U. S. CONSTITUTION. THAT AMENDMENT, IN EFFECT, PROVIDES THAT NO PRIVATE PROPERTY SHALL BE TAKEN FOR PUBLIC USE WITHOUT "JUST COMPENSATION" IN ACCORDANCE WITH DUE PROCESS OF LAW. THIS LANGUAGE AND CONCEPT WILL BE FOUND IN MOST STATE CONSTITUTIONS AND, AS WILL BE NOTED, HAS BEEN USED BY CONGRESS IN OTHER PROVISIONS OF THE FEDERAL POWER ACT ITSELF. IN PARTICULAR, SECTION 14(A) OF THE ACT, IN EFFECT, PROVIDES THAT HYDROELECTRIC PROJECTS OWNED BY STATE AGENCIES SUCH AS MUNICIPALITIES SHALL NOT BE TAKEN FROM THEM EXCEPT "UPON PAYMENT OF JUST COMPENSATION."

THE TERM "JUST COMPENSATION" IS A FLEXIBLE ONE. FERC, AS THE AGENCY CREATED BY CONGRESS AND CHARGED WITH ADMINISTERING THE FEDERAL POWER ACT, SHOULD BE ABLE TO WORK WITH THIS TERM IN DETERMINING, ON A CASE-BY-CASE BASIS, THE AMOUNT OF JUST COMPENSATION REQUIRED TO PROTECT THE EXISTING LICENSEE AND ITS CUSTOMERS SHOULD A PROJECT, FOR ANY REASON, BE TRANSFERRED TO ANOTHER LICENSEE IN THE CONTEXT OF RELICENSING. IN ECONOMIC TERMS, THE EXISTING LICENSEE AND ITS CUSTOMERS SHOULD BE COMPENSATED TO THE EXTENT THAT THEY ARE MADE WHOLE FROM THE LOSS OF THE PROJECT, OR INDIFFERENT TO ITS LOSS. JUST COMPENSATION MUST BE MADE FOR THE VARIOUS

PHYSICAL ASSETS THAT COMPRISE A PROJECT, SUCH AS REAL PROPERTY INTERESTS, CONCRETE, STEEL, TURBINES, GENERATORS AND THE DESIGN, CONSTRUCTION AND INSTALLATION OF THESE ITEMS. ACCORDING TO UNITED STATES SUPREME COURT CASE PRECEDENTS, WHICH DATE BACK TO THE BEGINNING OF OUR NATION, "THE NAVIGABLE WATERS, AND THE SOILS UNDER THEM" BELONG TO THE SOVEREIGN STATES. NO REGULATED UTILITY OR MUNICIPAL LICENSEE CAN CLAIM OWNERSHIP IN THE FLOWING WATERS. THE POWER OF THE FALLING WATER IS MADE AVAILABLE, UNDER STATE LAW, TO WHOMEVER OWNS THESE PHYSICAL ASSETS WHICH MAKE UP A HYDROELECTRIC PROJECT. NO COMPENSATION NEED BE MADE FOR ANY VALUE IMPUTED TO SUCH WATERS.

I STRONGLY URGE THE ENACTMENT OF S.426 AS THE FAIREST AND BEST APPROACH TO THE RESOLUTION OF THIS MATTER.

I AGREE WITH THE OBJECTIVE OF S.403, SPONSORED BY MY COLLEAGUE AND CLOSE FRIEND, SENATOR BENNETT JOHNSTON, OF LOUISIANA. IN FACT, IT COULD BE SAID THAT THE LANGUAGE OF THIS BILL, AS IT RELATES TO THE PREFERENCE PROBLEM, IS MORE DEFINITIVE THAN S.426. HOWEVER, I TAKE EXCEPTION TO SENATOR JOHNSTON'S POSITION THAT THE COMPENSATION QUESTION NOT BE ADDRESSED. I DO THIS BECAUSE THE ACT DOES LEAVE ROOM FOR A SHIFT IN THE OWNERSHIP OF A LICENSED PROJECT. THEREFORE, CONGRESS NEEDS TO PROVIDE PROTECTION FOR THE EXISTING

LICENSEE AND ITS CONSUMERS, SHOULD A PROJECT BE TAKEN AWAY FROM AND DIVERTED TO THE USE OF ANOTHER ENTITY WHICH HAS NOT DEVELOPED AND PAID FOR THE PROJECT. I WOULD BE UNWILLING TO LEAVE THE "NET INVESTMENT" FORMULA NOW APPEARING IN SECTIONS 14 AND 15 IN THE ACT AS THE BASIS FOR COMPENSATION. NET INVESTMENT, WHICH IS GENERALLY THE BOOK VALUE OF THESE PROJECTS, SIMPLY WOULD NOT REPRESENT THE AMOUNT OF THE LOSS TO THE CONSUMERS OF EXISTING LICENSEES, SHOULD THESE PROJECTS BE TRANSFERRED TO ANOTHER LICENSEE.

AGAIN, MR. CHAIRMAN, MAY I URGE THIS SUBCOMMITTEE AND THE FULL COMMITTEE TO ADOPT AS QUICKLY AS POSSIBLE THE PROVISIONS OF S.426.

THANK YOU FOR ALLOWING ME THE OPPORTUNITY TO TESTIFY ON THIS VERY IMPORTANT LEGISLATION.

STATEMENT OF REPRESENTATIVE CHARLES "CHIP" PASHAYAN, JR. BEFORE THE SUBCOMMITTEE ON WATER AND POWER, COMMITTEE ON ENERGY AND NATURAL RESOURCES, U.S. SENATE

JUNE 11, 1985

Mr. Chairman, members of the Senate Subcommittee on Water and Power, I thank you for scheduling these hearings on various legislative proposals addressing the issue of relicensing hydroelectric projects that, for the most part, have been built 40 and 50 years ago.

The need for questioning the relicensing began on June 27, 1980, when the Federal Energy Regulatory Commission (FERC) ruled that municipal utilities had preference over investor-owned utilities in relicensing of hydroelectric projects.

On October 6, 1983, however, FERC ruled that municipal utilities did not have preference in relicensing. These contrary rulings have produced a confusion in the industry and the public.

Yet I doubt that we should be here today had a 40-year-old rule of the Federal Power Commission, the predecessor to the FERC, been maintained. That rule held that "in those rare cases where two applications are equally matched, the FPC believes that the new license should be issued to the original licensee so long as he can meet the standards of the act at least as well as the other applicant." If together we shall embody this concept into law, we shall have restored to developers and consumers alike the degree of stability to which they are accustomed and entitled.

In an effort to eliminate the confusion and to restore consumers' confidence in a utility's ability to secure and provide a source of hydroelectric power, legislation has been developed to quash the inconsistent decisions' potential of raising rates and forcing construction of alternative sources for existing consumers.

I am a cosponsor of H.R. 44, whose counterpart in the Senate is S. 426. These bills serve to strengthen the test that if the current licensee's project is the best adapted and provides the greatest public benefit, it should continue. Only if the existing licensee did not commit to such a plan would a new license be subject to a competitive application. The bills do not alter nor do its authors intend to alter in any way the existing preference for municipal and state preferences in original license applications, nor does the legislation deal with municipal and state preference for power from Federally-built facilities.

H.R. 44 and S. 426 also deal with compensation should an existing licensee lose its license upon review by FERC, by requiring that the new licensee pay to the old licensee a just compensation that FERC shall determine in accordance with due process of law. The existing formula of net investment plus severance damages may not be adequate to compensate an existing licensee and its ratepayers for the loss of a project. The FERC, by its own admission, has not defined the term "severence damages." Under the provisions embodied in H.R. 44 and S. 426, the FERC would be given more certain authority to assure that the existing licensee is fairly compensated, and its ratepayers not unjustly disadvantaged. In other words, just compensation would be established on the genuine value of the hydroelectric plant measured by both its capacity and by any increased costs that will be required to operate its closest alternative.

In my State of California 85% of the consumers of electric power are served by investor-owned utilities without fully compensating them. To turn over the facilities built by those utilities would enrich only one in nine consumers. That is neither fair nor equitable.

The two bills, entitled "The Electric Consumers Protection Act of 1985," are designed to bring stability and sensibility back to electric power consumers. Despite the entities involved--whether they be investor-owned or public--they have a captive user: the consumer. The legislation seeks to return the relicensing issue back to an evaluation determined by the facts and public trust in each case.

Commissioner A.G. Sousa of the Federal Energy Regulatory Commission, in hearings before the House Subcommittee on Energy Conservation and Power in May 1984, expressed the matter thus:

> "Admittedly, if I had been given an opportunity to write on a clean slate, I would have preferred a statute which would have given

the original licensee a first option for a license renewal, provided that licensee met strict public interest criteria. Since the original licensee has little to gain, but its ratepayers have much to lose, that approach would be the fairest, the least disruptive, and the most likely to advance the public interest."

Mr. Chairman, Commissioner Souza's principle would be accomplished with passage of H.R. 44 and S. 426.

Thank you.

Senator **Murkowski**. Please proceed, gentlemen, in any manner in which you care to.

Senator **Wilson**. Mr. Chairman, I understand Senator Denton is chairing another committee, so I would yield to him.

Senator **Murkowski**. Senator Denton, we welcome you to the Subcommittee on Water and Power.

You can see by the attendance of not only the audience but our colleagues that this is a significant issue, that there is a wide divergence of opinion as evidenced by the four bills we are considering today. We look forward to your participation and your advice.

STATEMENT OF HON. JEREMIAH DENTON, A U.S. SENATOR FROM THE STATE OF ALABAMA

Senator **Denton**. Well, I want to thank the Senator from California for his deference, and you, Mr. Chairman. I appreciate the opportunity to testify in support of S. 426, Mr. Chairman, the Electric Consumers Protection Act. I am currently chairing a hearing before the Senate Security and Terrorism Subcommittee. I will have to immediately return to that upon completing the reading of my testimony, and I appreciate your indulgence, and the kind deference of the Senator from California.

Mr. Chairman and members of the subcommittee, I am here today to express my support for S. 426, the Electric Consumers Protection Act of 1985. The bill was introduced by my distinguished colleague from Wyoming, Malcolm Wallop, and is now cosponsored by 27 other Members of the Senate.

The issue before us today is essentially one of fairness. When the Federal Power Act was written in 1920, a preference was given to municipalities for the initial licensing of hydroelectric projects. The preference simply means that if a municipality and, for example, an investor-owned utility, were both to submit equally well adapted project applications, a preference would be granted to the application of the municipality. That preference for initial licensing is not being challenged. The need for the legislation before us has arisen because the Federal Power Act has proven ambiguous about whether the preference shown municipalities for original licensing is also available to them upon relicensing.

In 1968, the Federal Power Commission, the predecessor to the Federal Energy Regulatory Commission, represented to Congress that no such preference for municipalities existed at relicensing. In 1980, the FERC reversed the earlier opinion, saying that a preference would apply. In 1983, the Commission again reversed direction holding that a preference was not required by the act. The 1983 opinion is now being reviewed by the D.C. Circuit Court of Appeals.

Mr. Chairman, and members of the subcommittee, the legislation introduced by Senator Wallop and cosponsored by me and others is designed to dispel once and for all any ambiguity contained in that Federal Power Act. The legislation makes clear that existing licensees, whether public or investor-owned, shall have a full and fair opportunity to retain their projects and protect their customers and their investors, assuming that they continue to operate the projects in the public interest and in accordance with the "best adapted" standard provided for in section 10(a) of the Federal Power Act.

In the initial licensing process, the municipal preference stated in section 7(a) of the Federal Power Act governs and operates in effect to preclude any competitive interplay among competing applicants. In contrast, the relicensing process under S. 426 will still allow for full consideration of any and all competing applications filed by applicants seeking to beat the existing licensee in a best adapted project contest, as well as of all competing and contrasting ideas and positions of intervening parties, State and Federal Government agencies, and of course, the FERC staff.

In my State of Alabama, Alabama Power Co. serves more than 1 million electric consumers, all of whom could adversely be affected by the interpretation of the Federal Power Act to give an unqualified municipal preference in relicensing proceedings. Alabama Power Co. currently owns and operates 14 hydroelectric projects on the Coosa, Tallapoosa, and Warrior Rivers. The projects were designed and constructed to meet the energy needs of the citizens of Alabama. As you know, many parts of Alabama are still economically depressed. Hydroelectric power is, without question, the most inexpensive source of electric energy that can be provided to electric consumers. If Alabama Power Co. were to lose any of its existing hydroelectric projects, it would be necessary to replace the loss with alternative sources of energy. All the alternatives, such as gas, oil, coal, and nuclear, are far more costly. Although the cost situation is of particular concern to the citizens of my State, there are other reasons why S. 426 should receive our support.

There is no sound policy reason to support the transfer of a project from an existing licensee to a municipality simply because a license term has expired and a new license for an additional term is to be issued. If an existing licensee will, based upon all available information at the time of relicensing, continue to operate the project in the public interest, including making improvements in structure or operation required to achieve the necessary environmental and other project values, it should be given the opportunity to do so. To transfer a license to another entity based on any ground other than a licensee's failure to perform in the public interest would be unfair. S. 426, which would eliminate that risk, is a fair and equitable answer to the ambiguity found in the Federal Power Act.

The issue of the compensation to be paid to an existing licensee that loses its license for whatever reason during the relicensing process is also vital, even though the adoption of S. 426 would probably result in the projects in my State being relicensed to the existing licensee. The compensation provisions contained in S. 426 are required for fairness. Because the hydroelectric projects have been paid for by the existing licensee and their customers, the licensee should be justly compensated if the projects are taken away. Although the term "just compensation" has been questioned, it represents the concept embodied in the fifth amendment to the U.S. Constitution that no private property shall be taken for public use without just compensation in accordance with due process of law. I believe that any reasonable person would agree that just compensation should be paid for the taking of a project by a competing applicant.

In fact, in 1953 Congress passed legislation that made clear that even the Federal Government, much less a competing power supplier, cannot take over a hydroelectric project belonging to a municipality without paying just compensation. Provisions thought necessary to protect customers of a municipal electric system from economic impact of a hydro project takeover in 1953 are even more essential to the protection of all other electricity consumers today.

The FERC, as the agency charged by Congress with administering the Federal Power Act, is experienced in matters related to the cost of power, structures and facilities, and their replacement where necessary. It should be able to apply the concept of just compensation on a case-by-case basis to determine the amount fairly required to protect the existing licensee and its customers.

Therefore, I strongly support S. 426 as the most equitable solution. Congress must provide protection for existing licensees and their millions of consumers should projects be lost in the relicensing process. The net investment standard now provided for in sections 14 and 15 of the Federal Power Act is just not an adequate standard. Municipal competitors who may obtain a new license for a valuable hydro project not because they have a better adapted plan for the project but because of a statutory municipal preference during relicensing, would receive a tremendous financial windfall paid directly from the pocketbooks of the consumers served by the existing licensees. That would not be in the public interest, nor would it be fair.

Mr. Chairman, in conclusion, more than 75 percent of America's electricity consumers are served by regulated utilities. I believe that we have a responsibility to protect them from having the valuable benefits of hydroelectrtic power taken from them unfairly and without adequate compensation. Due to the municipal preference at initial licensing stages, and other Federal laws and developments preferential to public power systems, the more than 75 percent of American consumers served by regulated utilities enjoy only 32 percent of the hydropower available in the Nation. Congress should provide the consumers of existing investor-owned utilities with the opportunity to continue to enjoy the benefits of hydropower.

I strongly urge passage of S. 426.

I thank the chairman and members of the subcommittee and Senator Wilson.

[The prepared statement of Senator Denton follows:]

STATEMENT OF SENATOR JEREMIAH DENTON

SENATE ENERGY SUBCOMMITTEE ON WATER AND POWER

S. 426, ELECTRIC CONSUMERS PROTECTION ACT

June 11, 1985

Mr. Chairman and Members of the Subcommittee, I am here today to express my support for S. 426, "The Electric Consumers Protection Act of 1985." The bill was introduced by my distinguished colleague from Wyoming, Malcolm Wallop, and now cosponsored by 27 other Members of the Senate.

The issue before us today is essentially one of fairness. When the Federal Power Act was written in 1920, a preference was given to municipalities for the initial licensing of hydroelectric projects. The preference means that if a municipality and, for example, an investor-owned utility were both to submit equally "well adapted" project applications, a preference would be granted to the application of the municipality. That preference for initial licensing is not being challenged. The need for the

LEGISLATION BEFORE US HAS ARISEN BECAUSE THE FEDERAL POWER ACT HAS PROVEN AMBIGUOUS ABOUT WHETHER THE PREFERENCE SHOWN MUNICIPALITIES FOR ORIGINAL LICENSING IS ALSO AVAILABLE TO THEM UPON RELICENSING.

IN 1968, THE FEDERAL POWER COMMISSION, THE PREDECESSOR TO THE FEDERAL ENERGY REGULATORY COMMISSION (FERC), REPRESENTED TO CONGRESS THAT NO SUCH PREFERENCE FOR MUNICIPALITIES EXISTED AT RELICENSING. IN 1980, THE FERC REVERSED THE EARLIER OPINION, SAYING THAT A PREFERENCE WOULD APPLY. IN 1983, THE COMMISSION AGAIN REVERSED DIRECTION, HOLDING THAT A PREFERENCE WAS NOT REQUIRED BY THE ACT. THE 1983 OPINION IS NOW BEING REVIEWED BY THE D.C. CIRCUIT COURT OF APPEALS.

THE LEGISLATION INTRODUCED BY SENATOR WALLOP AND COSPONSORED BY ME AND 26 OTHER SENATORS IS DESIGNED TO DISPEL ONCE AND FOR ALL ANY AMBIGUITY CONTAINED IN THE FEDERAL POWER ACT. THE LEGISLATION MAKES CLEAR THAT EXISTING LICENSEES, WHETHER PUBLIC OR INVESTOR OWNED, SHALL HAVE A FULL AND FAIR OPPORTUNITY TO RETAIN THEIR PROJECTS AND PROTECT THEIR CUSTOMERS AND THEIR INVESTORS, ASSUMING THAT THEY CONTINUE TO OPERATE THE PROJECTS IN THE PUBLIC INTEREST AND IN ACCORDANCE WITH THE "BEST ADAPTED" STANDARD PROVIDED FOR IN SECTION 10(A) OF THE FEDERAL POWER ACT.

IN THE INITIAL LICENSING PROCESS, THE MUNICIPAL PREFERENCE STATED IN SECTION 7(A) OF THE FEDERAL POWER ACT GOVERNS AND OPERATES, IN EFFECT, TO PRECLUDE ANY COMPETITIVE INTERPLAY AMONG COMPETING APPLICANTS. IN CONTRAST, THE RELICENSING PROCESS UNDER S. 426 WILL STILL ALLOW FOR FULL CONSIDERATION OF ANY AND ALL COMPETING APPLICATIONS FILED BY APPLICANTS SEEKING TO BEAT THE EXISTING LICENSEE IN A "BEST ADAPTED" PROJECT CONTEST, AS WELL AS OF ALL COMPETING AND CONTRASTING IDEAS AND POSITIONS OF INTERVENING PARTIES, STATE AND FEDERAL GOVERNMENT AGENCIES AND OF COURSE, THE FERC STAFF.

IN ALABAMA, ALABAMA POWER COMPANY SERVES MORE THAN A MILLION ELECTRIC CONSUMERS, ALL OF WHOM COULD ADVERSELY BE AFFECTED BY THE INTERPRETATION OF THE FEDERAL POWER ACT TO GIVE AN UNQUALIFIED MUNICIPAL PREFERENCE IN RELICENSING PROCEEDINGS. ALABAMA POWER COMPANY CURRENTLY OWNS AND OPERATES 14 HYDROELECTRIC PROJECTS ON THE COOSA, TALLAPOOSA AND WARRIOR RIVERS. THE PROJECTS WERE DESIGNED AND CONSTRUCTED TO MEET THE ENERGY NEEDS OF THE CITIZENS OF ALABAMA. AS YOU MAY KNOW, MANY PARTS OF ALABAMA ARE ECONOMICALLY DEPRESSED. HYDROELECTRIC POWER IS, WITHOUT QUESTION, THE MOST INEXPENSIVE SOURCE OF ELECTRIC ENERGY THAT CAN BE PROVIDED TO ELECTRIC CONSUMERS. IF ALABAMA POWER COMPANY WERE TO LOSE ANY OF ITS EXISTING HYDROELECTRIC

PROJECTS, IT WOULD BE NECESSARY TO REPLACE THE LOSS WITH ALTERNATIVE SOURCES OF ENERGY. ALL THE ALTERNATIVES, SUCH AS GAS, OIL, COAL AND NUCLEAR, ARE FAR MORE COSTLY. ALTHOUGH THE COST SITUATION IS OF PARTICULAR CONCERN TO THE CITIZENS OF MY STATE, THERE ARE OTHER REASONS WHY S. 426 SHOULD RECEIVE OUR SUPPORT.

THERE IS NO SOUND POLICY REASON TO SUPPORT THE TRANSFER OF A PROJECT FROM AN EXISTING LICENSEE TO A MUNICIPALITY SIMPLY BECAUSE A LICENSE TERM HAS EXPIRED AND A NEW LICENSE FOR AN ADDITIONAL TERM IS TO BE ISSUED. IF AN EXISTING LICENSEE WILL, BASED UPON ALL AVAILABLE INFORMATION AT THE TIME OF RELICENSING, CONTINUE TO OPERATE THE PROJECT IN THE PUBLIC INTEREST, INCLUDING MAKING THE IMPROVEMENTS IN STRUCTURE OR OPERATION REQUIRED TO ACHIEVE THE NECESSARY ENVIRONMENTAL AND OTHER PROJECT VALUES, IT SHOULD BE GIVEN THE OPPORTUNITY TO DO SO. TO TRANSFER A LICENSE TO ANOTHER ENTITY BASED ON ANY GROUND OTHER THAN A LICENSEE'S FAILURE TO PERFORM IN THE PUBLIC INTEREST WOULD BE UNFAIR. S. 426, WHICH WOULD ELIMINATE THE RISK, IS A FAIR AND EQUITABLE ANSWER TO THE AMBIGUITY FOUND IN THE FEDERAL POWER ACT.

THE ISSUE OF THE COMPENSATION TO BE PAID TO AN EXISTING LICENSEE THAT LOSES ITS LICENSE FOR WHATEVER REASON DURING THE RELICENSING PROCESS IS ALSO VITAL, EVEN THOUGH THE

ADOPTION OF S. 426 WOULD PROBABLY RESULT IN THE PROJECTS IN MY STATE BEING RELICENSED TO THE EXISTING LICENSEE. THE COMPENSATION PROVISIONS CONTAINED IN S. 426 ARE REQUIRED FOR "FAIRNESS." BECAUSE THE HYDROELECTRIC PROJECTS HAVE BEEN PAID FOR BY THE EXISTING LICENSEES AND THEIR CUSTOMERS, THE LICENSEES SHOULD BE JUSTLY COMPENSATED IF THE PROJECTS ARE TAKEN AWAY. ALTHOUGH THE TERM "JUST COMPENSATION" HAS BEEN QUESTIONED, IT REPRESENTS THE CONCEPT EMBODIED IN THE FIFTH AMENDMENT TO THE U.S. CONSTITUTION THAT NO PRIVATE PROPERTY SHALL BE TAKEN FOR PUBLIC USE WITHOUT JUST COMPENSATION IN ACCORDANCE WITH DUE PROCESS OF LAW. I BELIEVE THAT ANY REASONABLE PERSON WOULD AGREE THAT JUST COMPENSATION SHOULD BE PAID FOR THE TAKING OF A PROJECT BY A COMPETING APPLICANT.

IN FACT, IN 1953, CONGRESS PASSED LEGISLATION THAT MADE CLEAR THAT EVEN THE FEDERAL GOVERNMENT, MUCH LESS A COMPETING POWER SUPPLIER, CANNOT TAKE OVER A HYDROELECTRIC PROJECT BELONGING TO A MUNICIPALITY WITHOUT PAYING JUST COMPENSATION. PROVISIONS THOUGHT NECESSARY TO PROTECT CUSTOMERS OF A MUNICIPAL ELECTRIC SYSTEM FROM ECONOMIC IMPACT OF A HYDRO PROJECT TAKEOVER IN 1953 ARE EVEN MORE ESSENTIAL TO THE PROTECTION OF ALL OTHER ELECTRICITY CONSUMERS TODAY.

THE FERC, AS THE AGENCY CHARGED BY CONGRESS WITH ADMINISTERING THE FEDERAL POWER ACT, IS EXPERIENCED IN MATTERS RELATED TO THE COST OF POWER, STRUCTURES AND FACILITIES, AND THEIR REPLACEMENT WHERE NECESSARY. IT SHOULD BE ABLE TO APPLY THE CONCEPT OF JUST COMPENSATION ON A CASE-BY-CASE BASIS TO DETERMINE THE AMOUNT FAIRLY REQUIRED TO PROTECT THE EXISTING LICENSEE AND ITS CUSTOMERS.

I STRONGLY SUPPORT S. 426 AS THE MOST EQUITABLE SOLUTION. CONGRESS MUST PROVIDE PROTECTION FOR EXISTING LICENSEES AND THEIR MILLIONS OF CONSUMERS SHOULD PROJECTS BE LOST IN THE RELICENSING PROCESS. THE NET INVESTMENT STANDARD NOW PROVIDED FOR IN SECTIONS 14 AND 15 OF THE FEDERAL POWER ACT IS JUST NOT ADEQUATE. MUNICIPAL COMPETITORS WHO MAY OBTAIN A NEW LICENSE FOR A VALUABLE HYDRO PROJECT NOT BECAUSE THEY HAVE A BETTER ADAPTED PLAN FOR THE PROJECT, BUT BECAUSE OF A STATUTORY MUNICIPAL PREFERENCE DURING RELICENSING, WOULD RECEIVE A TREMENDOUS FINANCIAL WINDFALL PAID DIRECTLY FROM THE POCKETBOOKS OF THE CONSUMERS SERVED BY THE EXISTING LICENSEES. THAT WOULD NOT BE IN THE PUBLIC INTEREST.

MR. CHAIRMAN, MORE THAN 75% OF AMERICA'S ELECTRICITY CONSUMERS ARE SERVED BY REGULATED UTILITIES. I BELIEVE THAT WE HAVE A RESPONSIBILITY TO PROTECT THEM FROM HAVING THE

VALUABLE BENEFITS OF HYDROELECTRIC POWER TAKEN FROM THEM UNFAIRLY AND WITHOUT ADEQUATE COMPENSATION. DUE TO THE MUNICIPAL PREFERENCE AT INITIAL LICENSING STAGES, AND OTHER FEDERAL LAWS AND DEVELOPMENTS PREFERENTIAL TO PUBLIC POWER SYSTEMS, THE MORE THAN 75% OF AMERICAN CONSUMERS SERVED BY REGULATED UTILITIES ENJOY ONLY 32% OF THE HYDROPOWER AVAILABLE IN THE NATION. CONGRESS SHOULD PROVIDE THE CONSUMERS OF EXISTING INVESTOR-OWNED UTILITIES WITH THE OPPORTUNITY TO CONTINUE TO ENJOY THE BENEFITS OF HYDROPOWER. I STRONGLY URGE PASSAGE OF S. 426.

THANK YOU.

Senator MURKOWSKI. Thank you, Senator Denton.

Senator Wilson, I assure you that any portion of your testimony that you would like to enter into the record will be entered as if read.

STATEMENT OF HON. PETE WILSON, A U.S. SENATOR FROM THE STATE OF CALIFORNIA

Senator WILSON. All right, Mr. Chairman. I think I get your drift.

Mr. Chairman, I too am here in support of Senator Wallop's S. 426, and with all the hydro licenses that are coming up for renewal before FERC, it is legislation that is especially timely, as is your hearing. I thank you.

The bill as I undertand it would repeal the application of the Federal Power Act's municipal preference clause to the relicensing of hydroelectric projects. Additionally, in the event the licensee loses in its bid for relicensing, I understand the bill to provide for just compensation for the value of the lost project.

Mr. Chairman, California's interest in this legislation is obvious, and it is quite simple. Electric power does not come cheap. There is no reason to unnecessarily make it more expensive than it already is, and more expensive power for the majority of California ratepayers would, unfortunately, be the result under the court's existing interpretation of the Federal Power Act, if this legislation is not agreed to by Congress. There are many utility ratepayers, municipal utility ratepayers in my State and elsewhere that stand to benefit by the application of municipal preference in the relicensing process.

But, Mr. Chairman, these ratepayers do not represent the public as some would have us believe. They represent only 25 percent of the market. Why they should benefit at the expense of 75 percent of the ratepayers has never been made clear to me. What is clear is that the application of municipal preference to relicensing will result in discrimination against the ratepayer who happens to reside in the service area of an investor-owned utility.

This is not to say that this legislation will result in higher rates for those serviced by municipal utilities because it won't. All this bill would do is to ensure that those investor-owned utilities and the customers and shareholders that they represent, those who have taken the risk and expended the capital necessary to build the hydrofacilities, will not lose those same facilities against their will at some later date just because they are not municipally owned.

It should be remembered that if an investor-owned utility loses a project to a municipal under the preference clause, the IOU loses only the power and not the customers that go along with the existing project. The IOU in that case is forced to find replacement power, and most certainly at a considerably greater cost, to service its same constituent load while municipal utility ratepayers walk away with a new source of power at a very—at a nearly negligible cost.

This situation as provided for in existing law is obviously highly inequitable and it should be rectified by Senator Wallop's legislation.

The other major provision of S. 426, the provision mandating just compensation for hydro projects lost in the relicensing process, is also a highly desirable improvement to the Federal Power Act. It seems incredible that some would consider it fair and in the best interests of the consumer to require that compensation for hydro projects lost in the relicensing battle be limited to net investment and severance damages. Anything less than just compensation is less than fair. Not only is it inequitable, it is bad public policy.

Replacement costs for hydro energy can be astronomical. If a licensee is prohibited from recovering most or all of the replacement costs for a project lost in the relicensing process, severe financial difficulties can potentially ensue that could compromise its service capability. Whatever economic circumstance may have existed in 1920 to justify the net investment language of the Federal Power Act simply does not exist in the reality of today's power costs. Just compensation as provided for in S. 426 is necessitated not only on the grounds of equity but also so the continued financial viability of those entities that provide the vital public service of generating power is not threatened and perhaps lost.

Mr. Chairman, I do not speak alone in support of this legislation. I am joined by members of the California Public Utilities Commission, represented today by Commissioner William T. Bagley, by the U.S. Chamber of Commerce, the Business Roundtable, the American Farm Bureau, the American Association of Retired Persons, and many other individuals and organizations. I know that you, Mr. Chairman, share my enthusiasm for this legislation. I look forward to working with you and Senator Wallop and the other cosponsors to see that this bill makes the progress that it should in the weeks ahead.

My thanks to you for your timely hearing and the opportunity to appear before you today.

[The prepared statement of Senator Wilson follows:]

TESTIMONY BY
SENATOR PETE WILSON

BEFORE THE
COMMITTEE ON ENERGY AND NATURAL RESOURCES
SUBCOMMITTEE ON WATER AND POWER

JUNE 12, 1985
10:00 AM
SD-366

Mr. Chairman, I appreciate the opportunity to appear before you today to share with you my support for S. 426, the Electric Consumers Protection Act of 1985. With all of the hydro licenses that are coming up for renewal before FERC, everyone here is well aware that this legislation is especially timely and it is therefore much appreciated that you would afford myself and others the opportunity to speak to this issue.

This bill, as I understand it, would disallow the application of the Federal Power Act's municipal preference clause to the relicensing of hydroelectric projects. Additionally, in the event that a licensee loses in its bid for relicensing, just compensation would be required for the value of the lost project.

California's interest in this legislation is simple: electric power does not come cheap and there is no reason to unnecessarily make it more expensive than it already is. And more expensive power for the majority of California ratepayers would unfortunately be the result -- under the court's existing interpretation of the Federal Power Act -- if this legislation is not agreed to by Congress.

There are many municipal utility ratepaters in my state and elsewhere that stand to benefit by the application of municipal preference. But these ratepayers do not represent the "public" as some would have us believe, they represent only 25% of the market. Why they should benefit at the expense of 75% of the ratepayers has never been made clear to me. What is clear to me is that applying municipal preference to relicensing results in discriminating against the ratepayer who happens to reside in the service area of an investor-owned utility.

This is not to say that this legislation will result in higher rates for those serviced by municipal utilities -- it won't. All this bill would do is insure that those investor owned utilities, and the customers and shareholders that they represent, who take the risk and expend the capital necessary to build hydro facilities, will not lose these same facilities -- against their will -- at some later date just because they are not municipally owned.

It should be remembered that if an IOU loses a project to a municipal utility under the preference clause, the IOU loses only the power and not the customers that go along with that project. The IOU in this case is forced to find replacement power -- most certainly at considerable cost -- to service its same constituent load while the municipal utility ratepayers walk away with a new source of power at practically negligible cost. This situation, as provided for in existing law, is obviously highly inequitable and should be rectified by legislation.

The other major provision of S. 426 -- the provision mandating just compensation in the event that a licensee loses license to a competitor in the relicensing process -- is also a highly desirable improvement to the Federal Power Act. It seems incredible to me that some would consider it fair and in the best interests of the consumer to require that compensation for hydro projects lost in a relicensing battle be limited to net investment and severance damages. Anything less than just compensation is less than fair.

Not only is it inequitable, it is also bad public policy. Replacement costs for hydro energy can be astronomical. If a licensee is prohibited from recovering most or all of the replacement cost for a project lost in the relicensing process, severe financial difficulties can potentially ensue that could compromise its service capability. Whatever economic circumstance that existed in 1920 which justified the net investment language in the Federal Power Act does not exist today. Just compensation -- as provided for in S. 426 -- is necessitated not only on the grounds of equity, but also so that the continued financial viability of those entities that provide the vital public service of generating power is not unduely compromised.

Mr. Chairman, I do not speak alone in support of this legislation. I am joined by members of the California Public Utilities Commission -- who I understand will be represented here today -- the U.S. Chamber of Commerce, the Business Roundtable, the American Farm Bureau, the American Association of Retired Persons, and others. I know that you, Mr. Chairman, share my enthusiasm for this legislation and I look forward to working with you on this bill in the weeks ahead.

Again, my thanks for the opportunity to be here today.

U.S. SENATOR
PETE WILSON

NEWS RELEASE

February 27, 1985

Contact: Lynda S. Royster
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WILSON SPONSORS ELECTRIC CONSUMERS PROTECTION ACT

WASHINGTON, D.C.--Senator Pete Wilson (R-CA) is sponsoring legislation to help hold down electricity costs for millions of Californians by ensuring investor owned utilities (IOUs) can continue to have access to low cost hydroelectric power.

"The central question in this debate is how do we provide the cheapest rate to the largest number of ratepayers," Wilson said. "There is no doubt that in

California, the public interest is better served by relicensing those investor owned utilities who have for decades been able to provide power to over 3.5 million Californians at lower rates due to their investment in hydroelectric generating facilities."

Federal licenses were granted to many utility companies in the 1920s and 1930s to harness the nation's rivers to generate hydroelectric power. Most of those licenses are now up for renewal by the Federal Energy Regulatory Commission (FERC), yet the right of the previously licensed companies to continue to receive the low-cost power generated by the dams they built 50 years ago has been contested by publicly-owned utilities, who believe they should be granted preference over the IOUs when FERC decides whether and to whom to extend the hydropower licenses.

"Seventy-five percent of this state's population is served by investor-owned utilities, and it is only fair that the utility companies that have in the past assumed the financial risk of building these hydroelectric power plants should continue to benefit, on behalf of their customers and stockholders, from their investment," Wilson said. "I can think of no principle more fundamental to our free market system than this--the principle of private property."

Wilson said that support for his bill, which is also being sponsored by Senator Malcolm Wallop (R-WY), has been expressed by the California Public Utilities Commission, the United States Chamber of Commerce, the Business Roundtable, the American Farm Bureau, the American Association of Retired Persons, and numerous newspapers, including the Oakland Tribune, San Francisco Chronicle, San Jose Mercury, and Fresno Bee.

Wilson and Wallop's bill simply states that FERC shall issue a new license to the existing licensee upon application unless the Commission determines that the project will not meet the standards prescribed in the 1920 Act, or under other specific circumstances spelled out in the bill.

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Senator **Murkowski**. Thank you very much, Senator Wilson.

We may have Senator Cranston joining us at a later time, and if so, I will interrupt the testimony from the scheduled witnesses to take his statement.

I would thank you. I would ask do any of my colleagues have any questions for Senator Wilson?

[No response.]

Senator **Murkowski**. If not, we thank you, and we wish you a very good day.

Senator **Wilson**. Thank you, sir.

Senator **Murkowski**. Excuse me, Senator Hecht, I apologize.

Do you have an opening statement of any kind?

Senator **Hecht**. No thank you, Mr. Chairman.

Senator **Murkowski**. I was going to assure you that anything that you wanted to state would be submitted as if read, and we will take that for a response.

The next witness is Hon. Anthony G. Sousa, Commissioner of the Federal Energy Regulatory Commission.

He will be joined by Hon. William T. Bagley, Commissioner on behalf of the National Association of Regulatory Utility Commissioners, the California Public Utility Commission in San Francisco.

Then we will move on to Panel 1.

And gentlemen, I am sorry, but I am going to keep time. As you may have observed, we have two sets of rules here, one behind the podium and another one on the other side. So you have heard from the various Senators expressing their opinions, and I think that you would agree that most of them have opinions, and the expression of that will, of course, be weighed heavily as we debate the issues. But most important, and the specific purpose of this hearing is for the public input. As a consequence we look forward to your testimony and would advise you that anything that you care to submit for the record will be entered, and the record will remain open for 2 weeks, is that correct?

Mr. **Brown**. Yes, sir.

Senator **Murkowski**. I would ask that you proceed. I am told the green light is for 5 minutes, the yellow light is for 1 minute, and the red light is an obvious one.

Mr. **Bagley**. Where are the lights?

Mr. **Sousa**. Right here.

Senator **Murkowski**. If anyone is color blind, we will help you out with that.

Please proceed, Commissioner Sousa.

STATEMENT OF HON. ANTHONY G. SOUSA, COMMISSIONER, FEDERAL ENERGY REGULATORY COMMISSION, ACCOMPANIED BY SUSAN COURT, LEGAL ASSISTANT

Mr. **Sousa**. Thank you, Mr. Chairman and members of the subcommittee.

I am Commissioner Anthony Sousa of the FERC. With me today I have my legal assistant, Susan Court. I also have several members of the Commission staff here with me.

In the interest of time, Mr. Chairman, I have submitted my testimony for the record, and I will present a short summary of my testimony.

Senator MURKOWSKI. We appreciate that, Mr. Commissioner.

Mr. SOUSA. I appreciate this opportunity to appear before you to discuss pending Senate bills that address the Commission's authority in hydroelectric relicensing proceedings.

My comments today represent my views and not necessarily those of the Commission as a whole. My prepared testimony focuses on the two bills referred to in Chairman Murkowski's letter of invitation, S. 403, the Hhydroelectric Facility Amendments of 1985, and S. 426, the Electric Consumers Protection Act of 1985. I did not have access to the texts of the two bills recently introduced, S. 1219 and S. 1260, for a sufficient time to analyze them for inclusion in that testimony. To the extent I am able, I will answer the subcommittee's questions on provisions of all four bills and will provide written responses for the record later for those questions I am not able to answer today.

It is understandable why hydroelectric projects are in such demand. They are reliable, flexible, economical, and renewable sources of energy. By the time a license for a hydroelectric project comes up for renewal, the project is substantially depreciated, and the power generated involves little more than operation and maintenance expenses. Consequently, competition for new licenses for existing projects represents high stakes for electric ratepayers.

Current law makes that competition a highly controversial and adversarial process. The directions taken by S. 426 and S. 403 to protect the ratepayers in this process encompass sound and reasonable policy considerations. By eliminating all municipal preference in relicensing proceedings, both bills avoid the potentially unfair and uneconomical result of the existing statutory language. The notion of a fixed statutory bias favoring municipal applicants in relicensing proceedings simply does not advance the public interest.

I advocate giving the existing licensee the first option for the new license, provided its plans for the new license term satisfy a strict public interest standard. S. 403 and S. 426 take this course, offering an approach that is not only less disruptive than that of current law, but also one that is more equitable and better serves the public interest.

As the Commission held in *Merwin*, the public interest lies in ensuring that as many consumers as possible receive the benefits of inexpensive hydroelectric power without regard to whether they are served by public agencies or regulated, privately owned utilities. Congress should recognize the economic impact on the customers by providing to a responsible existing licensee an advantage in the relicensing proceeding.

A presumption in favor of existing licensees is the approach that equity and economic efficiency dictate and is the resolution that I favor. I also strongly support the provision in S. 426 to mitigate the economic loss to the ratepayers of the former licensee when loss of the project license to another applicant forces transfer of ownership of the facility. There is some doubt that the current formula, net investment plus severance damages, would provide adequate takeover compensation. It could, in fact, result in outrageously unfair compensation.

In *Merwin*, for instance—and Senator Wallop mentioned this—the administrative law judge would have awarded Pacific Power & Light Co. $9.4 million as compensation for takeover by the Clark-Cowlitz Joint Operating Agency. The inequity that could result is starkly demonstrated by the Commission staff's estimate that to replace the power from that facility with a thermal plant would cost $732 million in 1988 dollars. Pacific Power & Light's estimate was $832 million in 1988 dollars. While the Commission was never faced with the question of the accuracy of the ALJ's decision on compensation, that decision indicates how the current standard might be calculated.

I have just one short paragraph, Mr. Chairman. Conversely——

Senator MURKOWSKI. That buzzer is not for you, Mr. Sousa, in fairness. We appreciate your awareness, though. [Laughter.]

Mr. SOUSA. Conversely, the just compensation standard in S. 426 would allow the Commission the flexibility to determine the fair value of the lost project, and is more likely to ensure compensation commensurate with the actual loss.

In sum, either S. 403 or S. 426 would provide helpful guidance to the Commission in its relicensing proceedings. They address a critical problem in an effective manner that will allow the Commission to move ahead confidently to renew the long-term operating authorizations of valuable energy resources.

Again I thank you, Mr. Chairman and members of the subcommittee.

[The prepared statement of Mr. Sousa follows:]

STATEMENT OF
A.G. SOUSA, COMMISSIONER
FEDERAL ENERGY REGULATORY COMMISSION
BEFORE THE
SUBCOMMITTEE ON WATER AND POWER
OF THE
COMMITTEE ON ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE
June 11, 1985

Mr. Chairman and Members of the Subcommittee:

I appreciate this opportunity to appear before you to discuss pending Senate bills that address the Commission's authority in hydroelectric relicensing proceedings, in particular with respect to the issue of municipal preference.

While my comments here today represent my views and not necessarily those of the Commission as a whole, the Commission's position regarding what the law currently requires in a relicensing proceeding is a matter of record. In its October 1983 decision in the Merwin Dam case [Pacific Power & Light Company, Opinion and Order Overruling Opinion No. 88, Reversing Initial Decision and Issuing New License to Original Licensee, 25 FERC ¶ 61,052 (1983) ("Merwin"), reh'g denied, 25 FERC ¶ 61,290 (November 22, 1983)], the Commission held that the preference in favor of state and municipal applicants in licensing proceedings under section 7(a) of the Federal Power Act ("FPA") does not apply against the existing licensee in a relicensing proceeding under section 15(a). The "municipal preference" does apply at relicensing against all but the existing licensee. The decision also held that the economic impacts of the transfer of a license from the existing licensee are among the factors the Commission considers in its public interest determination under section 10(a).

The Commission's interpretation in *Merwin* has been appealed to the United States Court of Appeals for the District of Columbia Circuit. The Commission's brief was filed with the court on April 26, 1984, and oral argument occurred on October 18, 1984. While I am confident the legal basis for the *Merwin* decision is sound, there is uncertainty surrounding the relicensing process that will persist until final court action occurs or until legislation is enacted.

My testimony focuses on the two bills referred to in Chairman Murkowski's letter of invitation, S. 403, the Hydroelectric Facility Amendments of 1985, and S. 426, the Electric Consumers Protection Act of 1985. I understand the Chairman has recently expanded the scope of this hearing to include S. 1219, the Fair Competition in Hydroelectric Licensing Act of 1985, and perhaps intends to address also S. 1260, the Hydroelectric Relicensing Reform Act. I have not had access to the text of either of the latter bills for a sufficient time to analyze them completely enough for inclusion in my prepared testimony. To the extent I am able, I will answer the Subcommittee's questions on provisions of all the bills introduced thus far and will provide written responses for the record later for those questions I am not able to answer here today.

At this point, I would like to discuss separately S. 403 and S. 426.

S. 403, HYDROELECTRIC FACILITY RELICENSING AMENDMENTS OF 1985

S. 403, introduced by Senator Johnston, amends section 7 of the FPA to apply municipal preference only to preliminary permits and initial licenses of a hydroelectric project. That is accomplished by removing the reference in that section to section 15, which contains provisions for relicensing a project. Accordingly, S. 403 firmly establishes that municipal preference does not apply at the relicensing stage. This goes beyond current law, which applies municipal preference against all non-municipal applicants except existing licensees.

Going a step further, the bill provides an advantage to the existing licensee, if it applies for a new license. The Commission is directed to award the license to the existing licensee unless another applicant has plans for the project that are better adapted to serve the public interest. Under current law, the applicant who has the plans best adapted to the public interest standard of section 10 is awarded the license.

Under current law, there is no provision to break a tie -- the circumstance in which two or more applicants submit plans that are equally well adapted -- when the tie is between the existing licensee and a competitor. S. 403 would award the license to the existing licensee under these facts; however, S. 403 provides no guidance to the Commission if the existing licensee does not compete for the license.

In addition, S. 403 directs the Commission, in judging the various plans submitted, to consider four criteria in its determination of the public interest. The Commission must consider: first, each applicant's plans to develop, conserve, and use the water resources of the region; second, the economic impact on each applicant's customers if it fails to get the license; third, each applicant's ability to operate the project efficiently; and finally, each applicant's need for the power to serve existing customers.

The current standard for evaluating applicants' plans is contained in section 10(a) of the FPA, which requires the project adopted to be the best adapted to a comprehensive plan for improving or developing a waterway for the use or benefit of interstate ~~or~~ foreign commerce, for the improvement and utilization of water power development, and for other beneficial public uses, including recreation. The language of the first criterion in S. 403 tracks very closely the language of the current standard. In fact, all of the criteria S. 403 would require the Commission to consider are already subsumed under Section 10(a). In my opinion, the public interest criteria set forth in S. 403 do not change current law. As such, this provision appears to be unnecessary and duplicative, and presents a serious question as to what weight these four criteria are to be given in the broader considerations that currently constitute the Commission's section 10(a) evaluation.

S. 426, ELECTRIC CONSUMERS PROTECTION ACT OF 1985

S. 426, introduced by Senator Wallop, eliminates the state and municipal preference at relicensing in the same manner as S. 403, by deleting the reference in section 7 to section 15. The effect, as in S. 403, is to remove municipal preference from all relicensing proceedings, whether or not the existing licensee is an applicant. As stated previously, in Merwin, the Commission held that the current statute provides for a municipal preference in relicensing proceedings except against the existing licensee.

S. 426 contains somewhat different provisions from those in S. 403 for judging applications in relicensing proceedings. S. 426 directs the Commission to consider first the existing licensee's plans for the next license term, using the section 10(a) standard for review, and to include in its evaluation the public benefits provided by the licensee during the preceding license term. If the Commission determines that these plans comply with the section 10(a) standard, the existing licensee is to be awarded the new license. If the existing licensee's plans do not satisfy the 10(a) standard, the Commission is authorized to issue the new license to a competing applicant that does meet the standard.

In addition to eliminating municipal preference in relicensing proceedings and establishing new guidelines for Commission decisionmaking in such proceedings, as does S. 403, S. 426 also amends current statutory provisions for compensating the project owner that loses its license to a competitor.

The existing compensation provisions of section 15(a) of the FPA require the new licensee to pay the previous licensee its net investment in the project plus severance damages. The standard in S. 426 would require the new licensee to pay just compensation to the previous licensee in an amount to be determined by the Commission in accordance with due process of law.

POLICY CONSIDERATIONS IN HYDROELECTRIC RELICENSING PROCEEDINGS

In order to summarize my views on the legislation the Committee is studying, I would like to discuss how S. 403 and S. 426 relate to the important policy considerations that are critical to hydroelectric relicensing decisions.

Hydroelectric projects are among our nation's most reliable, flexible, and economical sources of energy. This source of energy is, moreover, renewable, and helps reduce our dependence on imported fossil fuels. For these reasons, licenses to operate hydroelectric projects are important not only to public and private licensed operators to serve their customers but also to the general public. Hence, the public interest standard in the law is even more significant today than at the time it was enacted, 65 years ago, when all forms of energy were plentiful and seemingly in endless supply.

License renewals for existing projects are perhaps even more highly coveted than initial licenses to construct and operate new hydroelectric facilities. By the time a license comes up for renewal, the project has been operating for 30 to 50 years and is substantially, if not fully, depreciated. The cost of the power generated represents little more than operation and maintenance expenses. Hydroelectricity is, in short, a real bargain.

Consequently, under current law, competition for new licenses for existing projects presents issues that are highly controversial and adversarial. Legislation such as S. 426 or S. 403 is needed to add certainty and, consequently, to limit the amount of litigation that might otherwise occur. Protracted Commission and court proceedings will serve no one's interests, except the lawyers'.

The direction taken by these bills represents sound and reasonable policy considerations. By eliminating all municipal preference in relicensing proceedings, both bills avoid the potentially unfair and uneconomical result of the existing statutory language. There is simply no persuasive reason why

Congress should direct that any municipal applicant should be favored over any nonmunicipal applicant in any relicensing case. Viewed from another perspective, why should the ratepayers of municipal utilities be favored over the ratepayers of regulated, investor-owned utilities? The notion of a fixed, statutory bias favoring municipal applicants in relicensing proceedings simply does not advance the public interest.

I advocate giving the existing licensee the first option for the new license, provided its plans for the new license term satisfy a strict public interest standard. S. 403 and S. 426 take this approach. Accordingly, under this legislation the Commission would be required to inquire extensively into all factors relevant to the public interest in the development of the power potential of our Nation's water resources. This inquiry, coupled with the Commission's authority to impose terms and conditions on the license, and the opportunity for interested parties to raise relevant issues and fully test the facts, would assure that the public interest will be fully served.

The advantage given the existing licensee in S. 403 and S. 426 offers an approach not only less disruptive than that of current law but also one that is more equitable and better serves the public interest. As the Commission held in Merwin, the public interest lies in ensuring that as many consumers as possible receive the benefits of inexpensive hydroelectric power without regard to whether they are served by public agencies or regulated privately-owned utilities. Congress should recognize the economic impact on the customers by providing to a responsible existing licensee an advantage in the relicensing proceeding.

In most relicensing proceedings there probably will be few and only minor differences in the applicants' plans for the structure and operation of a project during the license term. In part, the technology of photocopying will take care of that. The critical question will not revolve around applicants' plans for power production, flood control, environmental impact, recreation, or coordination with upstream projects. In relicensing proceedings, there are likely to be no significant differences in the operational plans to meet these multiple considerations of a hydroelectric project.

The critical question will be how to allocate the economic benefits of the existing hydroelectric facility. A Congressional presumption in favor of the existing licensee is the approach that equity and economic efficiency dictate, and is the resolution that I favor.

I also strongly support the provision in S. 426 to mitigate the economic loss to the ratepayers of the former licensee when loss of the project license to another applicant forces transfer of ownership of the facility.

The existing standard of compensation -- net investment plus severance damages -- amounts to depreciated original cost plus improvements, plus damage to property as a result of severance of the project from the existing licensee's system. The Commission has not yet had occasion to define "severance damages."

There is some doubt that the current formula would provide adequate takeover compensation. Congress must remember that the original cost of projects now pending relicensing was in 1920s and 1930s dollars. Over the course of the fifty-year term of a license, the original cost and the cost of improvements have, for the most part, been depreciated. The net investment, therefore, would be insignificant. Consequently, under the current standard, the only possible protection for innocent ratepayers from the adverse effect of takeover lies in the undefined and cryptic term "severance damages."

The current standard could result in outrageously unfair compensation. In Merwin, for instance, the administrative law judge would have awarded Pacific Power & Light Company (PP&L) $9.4 million as compensation for takeover by the Clark-Cowlitz Joint Operating Agency. While the Commission was never faced with the question of the accuracy of the ALJ's decision on compensation, that decision indicates how the current standard might be calculated. The inequity that could result is starkly demonstrated by the Commission staff's estimate that to replace the power from that facility with a thermal plant would cost 731.7 million in 1988 dollars. PP&L's estimate was 832.4 million

Conversely, the just compensation standard in S. 426 would allow the Commission the flexibility to determine the fair value of the lost project, and is more likely to ensure compensation commensurate with the actual loss.

As a final point, I recommend that, in your Subcommittee's evaluation of this legislation, you consider adding a provision that makes pending relicensing applications subject to the new law. There are currently 48 licenses pending renewal. Two more will expire this year. The provisions of S. 403 and S. 426 would be a significant improvement over current law. In the event these provisions are enacted, the public benefits accruing from them should be applied to pending cases as well as to applications for those licenses that expire after enactment.

In sum, either S. 403 or S. 426 would provide helpful guidance to the Commission in its relicensing proceedings. They address a critical problem in an effective manner that will allow the Commission to move ahead confidently to renew the long-term operating authorizations of valuable energy resources.

I appreciate your consideration of my views, and I look forward to other opportunities to work with this Subcommittee to formulate responsible public policy on matters under the jurisdiction of the Commission.

Senator MURKOWSKI. Thank you very much, Commissioner Sousa.

Mr. SOUSA. And I will now make myself available for questions, if there are any.

Senator MURKOWSKI. We appreciate that.

Hon. William Bagley, commissioner on behalf of the National Association of Regulatory Utility Commissioners. We welcome you before the committee. We look forward to your testimony.

STATEMENT OF WILLIAM T. BAGLEY, COMMISSIONER, CALIFORNIA PUBLIC UTILITIES COMMISSION, ON BEHALF OF THE NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS

Mr. BAGLEY. Thank you, Mr. Chairman, and members. I am obviously glad to be here on this issue.

I speak today before you for the NARUC and also for the unanimous view of the California Public Utilities Commission. There are members left over from the former administration of Jerry Brown. I am one of the new appointees of Governor Deukmejian. Our position in California has been consistent regardless of the membership of the commission in favor of continuing the licensing of the private projects as they now exist, and I will obviously explain that.

We have in California—this is not just a California issue, but I want to make this clear first—85 percent—Senator Pete Wilson, and he was my colleague in Sacramento, said 75 percent, he wouldn't mind me if I said it is 85 percent of the California consumers are private power consumers, 15 percent are public power consumers. Without being presumptuous, I would like to say, and I know our commission would say that we here represent 85 percent of the consumers in California, and this is why we feel so strongly on this issue.

The confusion or uncertainty that exists today has already been explained to you, and I need not go into the FERC decisions and court cases other than to say it is very likely that we will have two conflicting circuit court cases. The FERC 1980 decision was upheld basically on the grounds that it was reasonable and there was evidence and interpretive authority to support it, the FERC 1983 decision, which is a reversal, could very well also be upheld by a different circuit on the same grounds, that it's reasonable and supportable, and therefore you would have conflicting FERC decisions and a real legal no-man's land.

There is also uncertainty in the definition in the present law, and as it is interpreted by FERC of how public interest should be evaluated. If I may, I believe of all the issues before you, this is probably the most important from our standpoint and actually one of the easiest to solve.

In the FERC opinion, we believe that they correctly interpreted the Federal Power Act as requiring the public interest—and that's when you're balancing the various applicants—to be viewed broadly to include considerations such as the number of ratepayers, which I just mentioned, served by each applicant, the costs associated with the transfer of the project, the uses to which the project would be put. Since this interpretation by FERC is also before the courts for review, Congress could do well in amending the Federal Power Act to make clear by enumerating the factors to be considered in the definition of "public interest" which must be viewed by FERC, and if you view those factors in the broad scope of number of ratepayers affected, statewide or areawide economic effect and not just narrow dollars of a given project, I am virtually positive that all reasonable people will conclude that the licensee who serves the most, i.e., in our case 85 percent, all other things being equal in the application, should continue.

And that is the type of preference I foresee, not a blank check but a preference based on if everything else is more or less equal, if you are serving the vast majority of the public, don't take their money away and give it to the minority.

That is my basic point here today.

Let me give you just a couple of figures, and I won't go on at any great length, but I think they dramatize my point. Again, I am not trying to talk about California, but that is from whence I come, and these are the numbers I know.

We have got 85 percent of the consumers already who are receiving electrical service from privately owned utilities. Two utilities, PG&E and Southern Cal Edison, have a total of 86 hydro projects, most of them in the Sierras, licensed by FERC.

In an average year, PG&E's hydroelectric projects generate approximately 16 billion kilowatt hours of electricity. That is about 12 percent of their total electrical output. That is the equivalent of two and a half standard nuclear units in a normal hydro year. But in a good hydro year, that is the equivalent of five standard nuclear units. And I don't know how many oil and gas units. Think of the money that our consumers save.

Let me say right there, they save money because in a good hydro year we pass that saving to the ratepayer. In a bad hydro year more oil and gas is purchased, and we pass that increase to the ratepayer. Utility ratemaking is not like a retail store. You don't get a markup on the juice. You get a rate of return if you can efficiently earn it on your capital investment. But all fuel costs and the lack of fuel costs pass directly to the benefit of the ratepayer in the instance of hydro, and to the detriment of the ratepayer without hydro. That is an automatic, every 6 months formula which we implement, and that is a nationwide formula that is applied by utility ratepayers all over the Nation.

So just to quantify the amounts: of annual increased costs, annual increased cost basically is buying more oil, if all of these projects in California were transferred and new replacement capacity—these are my two assumptions—would have to be made, right now $150 million per year, $260 million in 1990, $400 million in 1995 per year, $950 million in 2000, $2.3 billion in 2005, as these licenses expire, and as more oil and gas is used.

Senator **Murkowski**. I would ask you if you could summarize your remaining statement.

Mr. **Bagley**. I shall summarize by stating what I think Winston Churchill once said. Never have so few tried to take so much from so many at so little cost.

Thank you, Mr. Chairman.

[The prepared statement and a subsequent submittal from Mr. Bagley follow:]

UNITED STATES SENATE
COMMITTEE ON ENERGY AND NATURAL RESOURCES
SUBCOMMITTEE ON WATER AND POWER

TESTIMONY OF THE

NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS
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ON
THE RELICENSING OF HYDROELECTRIC FACILITIES
PRESENTED BY
THE HONORABLE WILLIAM T. BAGLEY, COMMISSIONER
CALIFORNIA PUBLIC UTILITIES COMMISSION

JUNE 11, 1985

1889

SUMMARY OF NARUC STATEMENT ON ISSUES RELATING TO THE RELICENSING OF EXISTING NON-FEDERAL HYDROELECTRIC FACILITIES

* The public interest is best served by spreading the benefits of hydroelectric power among as many of the nation's electric consumers as possible. The customers of State and municipal electric utilities already benefit by a disproportionately large share of hydroelectric generation through wholesale purchases, as preference customers of Federal hydroelectric projects, and through municipal preference for initial licenses under the Federal Power Act.

* The NARUC supports legislation to amend the Federal Power Act to eliminate the uncertainty which has characterized the issuance of new licenses for existing hydroelectric projects. We support the concept that an existing licensee would be issued a new license for the project unless its operation of the project would not be in the public interest.

* The NARUC supports the inclusion of specific criteria to govern the evaluation of the public interest and that the public interest be evaluated in its broadest sense.

* The NARUC believes that the vast majority of ratepayers should not be allowed to lose their fair share of this important resource, hydroelectric.

Mr. Chairman and Distinguised Members of the Subcommittee:

My name is William T. Bagley and I am one of the two Commissioners with the California Public Utilities Commission (CPUC) newly appointed by Governor George Deukmejian. I am testifying today on behalf of the National Association of Regulatory Utility Commissioners (commonly referred to as the NARUC) and speak for all five members of the CPUC. Accompanying me today from the NARUC are Karen Hochstein, Director of Congressional Relations and Phyllis Levine, Assistant Director of Congressional Relations.

The NARUC is a quasi-governmental, nonprofit organization founded in 1889. Within our membership are the governmental agencies of the fifty States, the District of Columbia, Puerto Rico, and the Virgin Islands which are engaged in the regulation of utilities and carriers. Our chief objective is to serve the consumer interest by seeking to improve the quality and effectiveness of government regulation in America.

I. Introduction

We greatly appreciate this opportunity to express our support for Congressional efforts to amend Part I of the Federal Power Act regarding the issuance of new licenses for existing hydroelectric projects. As the first Chairman of the Commodity Futures Trading Commission from 1975 to 1978 and as a member of the California Legislature between 1960 and 1974, I am especially pleased to address an issue that is important to the consumers in California and throughout the nation. As outlined in the resolution adopted by NARUC on November 10, 1983, and attached as an appendix to this testimony, important reasons exist for Congress to undertake this review. Moreover, with licenses for many hydroelectric projects having already expired, and with those of many others expiring in the near future, the timeliness of such review could not be greater.

Compounding the need for congressional action at this time is the substantial uncertainty which surrounds this entire matter. Under the Federal Power Act, the Federal Energy Regulatory Commission (FERC) is directed to give preference to applications for hydroelectric projects submitted by municipal utilities; provided that their plans be equally well adapted as those of any private applicant to serve the public interest. Originally, in Opinion No. 88, issued on June 28, 1980, the FERC interpreted this direction as applying not only when a license is first issued for a project but also on expiration of that original license when a new license is sought. Further, Opinion No. 88, interprets the intention of Congress to require that the "public interest" be evaluated in its broadest sense to include consideration of social factors and economic consequences. Later, on September 14, 1983, in a proceeding involving competing applications for a new license to continue operation of the Merwin Project, located in the State of Washington, the FERC decided to reverse Opinion No. 88, now determining that the preference for municipal utilities does not apply on expiration of an original license when a new license is sought, but only when a license is originally issue. Judicial review of this decision has been sought by several parties representing the interests of municipal utilities, and the matter is now before the U.S. Court of Appeals for the District of Columbia Circuit.

Further uncertainty exists concerning how the public interest should be evaluated. In our opinion, the FERC correctly interpreted the Federal Power Act as requiring the public interest to be viewed broadly to include considerations such as the number of ratepayers served by each applicant, the costs associated with the transfer of a project, and the uses to which a project would be put. As a matter of public policy, in light of the great importance of hydroelectricity for today's society and economy, this approach cannot be faulted. Inasmuch as this interpretation of the FERC is also before the courts for review, Congress would do well in amending the Federal Power Act to make clear, by enumerating the various factors to be considered, that the public interest must be viewed in its broadest scope.

III. The Need for Clarification

The enormous stakes for the public in this matter can be demonstrated by reference to the example provided by California's experience. In California, where 85 percent of all consumers receive electrical service from privately-owned utilities, Pacific Gas and Electric Company and Southern California Edison Company operate a total of 86 hydroelectric projects under licenses issued by the FERC. In an average year, PG&E's hydroelectric projects generate approximately 16,000 megawatt-hours of electricity, or about 12 percent of its total electrical output.

That is the equivalent of approximately 12 standard nuclear units. If the various projects of PG&E and SCE were ordered transferred as existing licenses expire because applications submitted by municipal utilities were given preference and social factors and economic considerations ignored,the annual cost to the ratepayers of PG&E and SCE would approximate $150 million in 1985, $260 million in 1990, $460 million in 1995, $950 million in 2000, and $2.32 billion in 2005. As I have noted before, "Never have so few tried to take so much from so many."

On the other hand, if the Federal Power Act were clarified to provide that a new license would be issued to the existing licensee on expiration of an original license unless the public interest, broadly construed, would be better served by its issuance to a competing applicant, municipalities would nevertheless retain a fair opportunity to obtain hydroelectric power. In the first place, as preferential customers of federal agencies and wholesale customers of privately-owned utilities, municipal utilities already enjoy access to more than their proportionate share of such inexpensive power, and of course, they enjoy a tax-free, low-interest existence. Moreover, either by exercising their powers of eminent domain under Section 14(a) of the Federal Power Act or by applying for new licenses under Section 15(a), municipal utilities can still seek to acquire hydroelectric projects. In the former case, they need only pay just compensation, and in the latter only demonstrate that their plans would better serve the public interest.

For all of these reasons, therefore, NARUC and the CPUC strongly support the efforts of Congress to effect needed clarification of the Federal Power Act. To create a preference for municipal utilities without requiring them to pay just compensation would be simply to transfer the benefits of hydroelectric resources from all of the nation's consumers to the very few. Far fairer would be to establish conclusively that these resources be allocated according to how best the public can be truly served.

You will note that I have not discussed the issue of "Compensation". This is primarily because I believe it to be irrelevant. What is relevant and needed is a continuation, where broad public policy dictates, of hydro power benefits for the private power ratepayer.

Of course, if there were transfers of projects, the transferring ratepayers should be fully compensated for the facilities that they have paid for. But that mechanism is not a solution. In fact, it might even exacerbate the already skewed rate structures. Assuming full value compensation, and assuming that this full value were re-invested in new projects, then the capital investment upon which private power rates are based would increase many, many fold. We would have skewing squared.

IV. **Conclusion**

The conclusion and the solution is to express the intent of Congress to allow the broad public interest to prevail; preserving hydropower to benefit the many rather than the few. We are not and I am not here defending private power interests. Reasonable rates of return on shareholder investment will continue under our regulatory regimen. What we are saying is that the vast majority of ratepayers should not be allowed to lose their fair share of this common resource, hydroelectric energy. The NARUC respectfully urges the Subcommittee to support legislation to provide for more protection to electric consumers.

Appendix A

Resolution Supporting Congressional Legislation to Provide that Existing Licensees of Hydroelectric Projects Shall Receive a New License if Their Projects Have Been and Will Be Operated in the Public Interest.

WHEREAS, State regulatory commissions recognize that hydro-electric projects licensed to investor-owned utilities provide numerous benefits to the million of customers of those utilities, the most notable for which is the low-cost, essentially fuel-free source of electric generation; and

WHEREAS, these millions of customers would incur higher electric rates for the sake of far fewer state or municipal electric customers if the utilities were forced to transfer their hydroelectric projects to these preference entities under a possible interpretation of the Federal Power Act; and

WHEREAS, the Federal Energy Regulatory Commission and its predecessor, the Federal Power Commission, on three occasions during the last 15 years have reached two different conclusions concerning whether a municipal preference applies against existing licensees at the time of relicensing existing hydroelectric projects; and

WHEREAS, the uncertainty which has characterized this issue in the past will continue as the Commission's most recent interpretation is litigated in the Courts and because subsequent Commissions could interpret the statute differently; and

WHEREAS, this uncertainty increases the difficulty for system planners and other utility officials to plan effectively and economical to meet future generation needs of their customers; and

WHEREAS, the relatively fewer customers of State and municipal electric utilities already benefit from a far greater share of hydroelectric generation in the country through wholesale purchases from investor-owned utilities with hydro projects, as preference customers of Federal hydroelectric projects under numerous Federal laws, and through the municipal preference for initial licenses under the Federal Power Act; and

WHEREAS, the public interest is best served by spreading the benefits of hydroelectric power among as many of the nation's electric customers as possible, rather than by further concentration of those benefits in a relatively small segment of those customers; and

WHEREAS, the net investment plus severance damage compeninadequate to compensate the utilities and their customers fairly if a new license for their existing project is issued to another licensee; now therefore, be it

RESOLVED, the National Association of Regulatory Utility Commissioners, assembled at its Ninety-fifth Annual Convention in Detroit, Michigan, supports the amendment of the Federal Power Act to provide that any existing licensee shall receive a new license for the project unless the existing licensee's past and future operation of the project would not be in the public interest as determined by the Federal Energy Regulatory Commission under the standards presently in the Act and, should a new license for the project be issued to a licensee other than the existing licensee, the new licensee shall pay to the existing licensee just compensation as determined by the Federal Energy Regulatory Commission in accordance with due process of law.

PUBLIC UTILITIES COMMISSION
STATE OF CALIFORNIA

STATE BUILDING
SAN FRANCISCO, CALIFORNIA 94102
[illegible]

COMMISSIONER
WILLIAM T. BAGLEY

June 21, 1985

Honorable Frank Murkowski, Chairman
Senate Subcommittee on Water and Power
of the Senate Committee on Energy and
Natural Resources
212 Senate Hart Office Building
Washington, D.C. 20510

Re: Proposed Legislation Concerning the Licensing
of Hydroelectric Facilities

Dear Mr. Chairman:

As a supplement to my testimony presented before your Subcommittee last week, let me emphasize one point and also offer some additional comments for your consideration.

First of all, a correction. My prepared testimony contained the following statement at pages 3 to 4: "In an average year, PG&E's hydroelectric projects generate approximately 16,000 megawatt-hours of electricity, or about 12 percent of its total electrical output. That's the equivalent of approximately 12 standard nuclear units." This should be changed to read: "In an average year, PG&E's hydroelectric projects generate approximately 12 million megawatt-hours of electricity, or the equivalent of about 2 standard nuclear plants. In a good year, these projects generate the equivalent of 3 or more such plants."

On another topic, my prepared testimony postulates that payment of full compensation could dramatically increase ratebase when used for new facilities which, in turn, would increase rates. Though this is theoretically true, State Regulatory Commissions simply would not allow this to happen. Much more likely would be state regulatory action which would "transfer the basis" of the acquired plant to any new (replacement) facility built with the compensatory payment. In this event, the capital payment would be used for new investment, but the ratebase would not increase. Also, in testimony this year and during 1984, the utilities stipulated that they will not claim a shareholder gain when receiving full compensation. In view of these factors just mentioned, it would make good sense to include in any final legislation a provision expressly guaranteeing that full compensation be paid, that itbe used exclusively to benefit ratepayers, but that it not be included in ratebase as a result of any new construction.

One final point. At page 4 of my prepared testimony, I state that "(I)f the Federal Power Act were clarified to provide that a new license would be issued to the existing licensee on expiration of an original license unless the public interest, broadly construed, would be better served by its issuance to a competing applicant, municipalities would nevertheless retain a fair opportunity to obtain hydroelectric power." If the FERC in evaluating competing applications were to construe the public interest broadly so as to include factors such as the number of ratepayers served by each applicant, the costs associated with the transfer of a project, and the uses to which a project is put, then the matter of preference need never arise. In order to insure the broadest assessment of the public interest, therefore, I strongly suggest that language to this effect be included in any final legislation.

Thank you for the opportunity to testify and for this occasion to state my views further.

Sincerely yours,

WILLIAM T. BAGLEY
Commissioner

cc: Russ Brown
Mike Harvey
Commissioners

Senator MURKOWSKI. Thank you very much, Mr. Commissioner.

Mr. BAGLEY. Questions?

Senator MURKOWSKI. I commend you for your ability to say in just a few words what others may spend a good deal of time trying to convey.

Mr. BAGLEY. Incidentally, I ignored my total statement here, but I will stand by it.

Senator MURKOWSKI. You did quite well.

I have a question for Commissioner Sousa. With regard to the issue of consistency, I think that you would agree that the licensees need the assurance from FERC of consistency and policy. Yet we have seen FERC reverse itself in about a 3-year time span, on the *Merwin* case after establishing what was apparently policy on the *Bountiful* case. The fact that we have this apparent lack of consistency is confusing to the licensees in the sense that if the rules are changing or if the rules are grey, people don't understand the various rules. Isn't consistency an objective and a responsibility from a policy standpoint for FERC?

I would appreciate your comments as to how we can expect consistency from FERC so everybody will be playing by the same set of rules.

Mr. SOUSA. Thank you, Mr. Chairman. The Commission endeavors at all times to bring about consistency so that the people that we regulate can rest assured in knowing that they can act based on the decisions that the Commission puts out.

When the Commission came to and was confronted with the *Bountiful* decision, it appeared clearly to the Commissioners on the Commission that there was an error in the earlier interpretation, and as is the case under law, it was deemed that we should correct that error as soon as possible so that this error would not continue and the inequities would not stay.

So what we did was read the statutes before us, and it was fairly clear to us—although there was a possibility for ambiguity, as Senator Wilson may have pointed out, and others have pointed out, that on relicensing some may feel that there is a preference—but it was clear to us that the preference was only in section 7(a), and when an existing licensee competes, the preference for a municipal utility in 7(a) is not applied in section 15.

Consistency, Mr. Chairman, can be guaranteed by either court action, and our decision in *Merwin* is before the Court, or by this body, and we look forward to the consistency that all of us are seeking so we can then move on from there.

Senator MURKOWSKI. Thank you very much, Mr. Commissioner.

Commissioner Bagley, you indicated factors that you would have FERC consider as being significant. Are you prepared to list those in some priority? It would appear that it would be expeditious to do so rather than just throwing out various "factors."

Mr. BAGLEY. No. 1, sir, I will supplement the record with the assistance of my full commission. Right now let me just be responsive.

As I said, the most important factor to me would be to have Congress instruct FERC and the courts to interpret the word "public interest" when FERC is balancing the benefits to the applicants in the broadest sense, so that you would include the effect on the whole area, i.e., the numbers of ratepayers, for example, which is obvious.

Priority-wise, I would say that is frankly a number one issue, and easily solvable, and I will give you the benefit of some language that any one of you could draft better than I.

Senator **Murkowski**. I am not so sure of that.

Mr. **Bagley**. All right.

Senator **Murkowski**. I would suggest you keep your options open, and if you feel strongly enough about the issue to submit the language to the committee, because you would be surprised at what might happen and how simplified it might be. We have a professional staff that has a tendency to get a little lengthy so that sometimes the Senators do not even understand.

Mr. **Bagley**. I've been known to runoff at the quill myself. Not at the mouth, but the quill.

Senator **Murkowski**. I would suggest you pursue that.

Mr. **Bagley**. I shall. But just talking about priorities, I would put that response No. 1. Compensation becomes almost irrelevant if those factors are considered. I do not mean to demean the concept of compensation, but just a couple of sentences on that. Compensation by our procedure, by the utilities stipulation, Congress could very well say this also goes back to the ratepayer.

If there is a project that is purchased and there is a $1 billion capital gain, if you will, we would maintain the same base if that $1 billion were reinvested and a new project came along comparable to tax law, we would maintain the same base as the old project, i.e., $100 million. Then $900 million wouldn't go to the shareholders; it would be either not necessarily refunded to the ratepayer, but used for additional capacity, but that amount would not go into the rate base. That is the way we would treat it. Congress can tell all the States to treat the money that way. There would be no windfall.

Senator **Murkowski**. I think your point is well made. The question of compensation obviously is going to be the determining factor, whether the economics are going to favor one particular position or another, whether it be private or public.

Senator Johnston.

Senator **Johnston**. I thank you, Mr. Chairman.

Commissioner Sousa, Commissioner Bagley, welcome to the committee. Yours was excellent testimony. It will be very helpful to the committee.

Commissioner Sousa, we're talking about project improvements here on existing projects. My guess is that given the fact that these are existing projects, the improvements that can be made are fairly limited and where they can be made they're fairly standard, aren't they? We're not talking about a lot of competition with respect to these existing projects. Am I right?

Mr. **Sousa**. That's correct, Senator. Inasmuch as they have operated the facility for a term, the Commission and everyone else would have an opportunity to see how it was operated, and you have that past experience to show that it has been operated to the benefit of the public, and you can see what else is needed for the new term.

Senator JOHNSTON. Right. But I mean in terms of the improvements, the new thingamagigs, there are not many thingamagigs to be put on these existing projects, by and large.

Mr. SOUSA. I don't believe that there would be too much to be added to it.

Senator JOHNSTON. Thank you

Commissioner Sousa, on the 10(a) test, I have section 10(a) here, and it lists some things which in the judgment of the Commission will be best adapted to a comprehensive plan, et cetera. My focus here is on the words "best adapted." That implies a comparison, does it not?

Mr. SOUSA. Yes, Senator, it implies comparison to see which one of several would be the best——

Senator JOHNSTON. That's right.

Mr. SOUSA. Or a comparison.

Senator JOHNSTON. And of course the word "best" is a superlative. It is the—only one can be the best. It doesn't envision a tie.

Mr. SOUSA. I would agree with that.

Senator JOHNSTON. All right, now if it doesn't envision a tie under section—I mean under bill S. 426, it says that the Commission shall give the license to the one who meets muster under 10(a), that is, the one best adapted, so since 426 refers to section 10(a), it doesn't provide for a tie, either, does it?

Mr. SOUSA. Well, section 426——

Senator JOHNSTON. I mean, S. 426.

Mr. SOUSA. S. 426 apparently refers to a test where—and there appears to be some question here—where you compare that plan in isolation with an ideal plan which the Commission has in mind, and if it meets that under section 10(a), and I remember the word "shall," then you shall give it to the existing licensee.

Senator JOHNSTON. Right. What I am getting at is that S. 426 doesn't have a preference here, because it refers to section 10(a) where you must have the best license.

Mr. SOUSA. That's correct.

Senator JOHNSTON. So, therefore, it provides for no tie, and therefore, no preference. Am I right in that?

Mr. SOUSA. That's correct. There's no automatic granting of the license. It has to meet that standard.

Senator JOHNSTON. The standard is one of best.

Mr. SOUSA. Best adapted. That's correct.

Senator JOHNSTON. Commissioner Sousa, with respect to my bill, which is S. 403, we set forth four tests there as to how you compare on relicensing the plans of each applicant to develop conserve and utilize in the public interest the water resources, the relative economic impact, et cetera, upon the customers. And you're familiar with those four tests, are you?

Mr. SOUSA. Yes, sir.

Senator JOHNSTON. All right. Now I have here section 10(a), and reading the language of section 10(a), it does not at all refer to those four tests. It says that the project shall be best adopted for a comprehensive plan for improving or developing a waterway, et cetera. At least it does not, it certainly does not include all four tests in the language of section 10(a). I am right on that, am I not?

Mr. SOUSA. The first standard, I believe, would paraphrase the section 10(a) standard.

Senator JOHNSTON. Right, the first one.

Mr. SOUSA. Yes, the first one of the four.

Senator JOHNSTON. And the others are not explicitly contained in section 10(a)?

Mr. SOUSA. Not explicitly contained.

Senator JOHNSTON. All right. Now the Commission has had occasion to have only one relicensing test, has it not? Am I right on that?

Mr. SOUSA. Well, the most recent one would be the *Merwin* case.

Senator JOHNSTON. I mean, is there a whole body of relicensing law in the Commission?

Mr. SOUSA. I don't believe so.

Senator JOHNSTON. All right. So really section 10(a) has not been widely interpreted as to what those phrases mean except with respect to initial licensing. Am I correct?

Mr. SOUSA. That's correct.

Senator JOHNSTON. And the four tests which I have here in S. 403 apply to relicensing as opposed to initial licensing. For example, the relative impact upon customers served by each applicant. Obviously, if you've got an initial license you're not talking about customers being served because there isn't any service to begin with.

Mr. SOUSA. That's correct.

Senator JOHNSTON. All right. So can we agree then that S. 403 does in fact contain at least three tests which are new and not contained in section 10(a)? Is that fair?

Mr. SOUSA. Well, Senator, as a matter of fact, those three standards that you have in addition to the first standard, the Commission in considering the decision in *Merwin* did in fact take those into account, and it's the feeling that they are subsumed in section 10(a).

Senator JOHNSTON. We agree it is not explicitly stated in section 10(a), and there's only one decision, the *Merwin* decision, which does in fact—the Commission, I think correctly, says that the Commission has the broadest possible view as to what can be included or cannot be included—but the fact of the matter is, one decision, it being on appeal, would hardly make clear the test which the Commission would apply or indeed which a court might later apply on appeal.

What I am getting at is that it is quite useful to list these tests if the tests are good tests, to list it in the statute as opposed to relying upon one decision of FERC which is on appeal. Would you agree with that?

Mr. SOUSA. Yes; as a general proposition, I would agree with that, Senator, but there would be times when different cases and different circumstances might require some discretion from the Commission, and we would then be tied to these four, and if a case presented itself in that circumstance, I would say that it would be better to have a wider discretion there.

As a matter of fact, Senator, the second standard was used specifically in *Merwin* to make the decision there, the economic impact.

Senator **Johnston**. So we are certainly in agreement that that's a good test.

Mr. **Sousa**. I do agree, sir.

Senator **Johnston**. And actually the language of the other, in fact, of all four, are rather broad, are they not, so that you would hardly be circumscribed in the exercise of discretion.

Mr. **Sousa**. The only question—I agree with that, sir, but the only question I have, Senator, is what weight would we give to these four? That is the reason why I suggested discretion, because different cases would require us to give different weight to each one of those four, and as a matter of fact we have used all of those four in that decision.

Senator **Johnston**. I would submit to you that under the four tests you would have considerably broader discretion than you would under section 10(a), because section 10(a) does not at least explicitly give you the power to determine such matters as economics and the relative effect upon customers.

I think you properly did it. I make no argument with your *Merwin* decision. I am just saying that some court may come along and say you exercised discretion where none is provided in the statute, and I simply want to explicitly give you that discretion.

One final question. At the expiration of these licenses, what you have here is, you have a dam, a hydro facility, and a license. Now when the license expires, what does the applicant who formerly owned the license, what does he own?

Mr. **Sousa**. According to the statute, what he would own would be the net investment value plus whatever damage would occur as a result of taking it away—severance damages. That is the statutory standard that we now have to apply.

Senator **Johnston**. What I am getting at is, at the expiration of the license, the existing licensee owns a bunch of bricks and rocks or whatever that are up there in the dam, so under this phrase, "just compensation," when his license has expired, and he has no further right to operate this dam, that main part of his value being gone, what is just compensation to him, and how would FERC or how would a court interpret that just compensation?

Mr. **Sousa**. Well, Senator, it is not really just compensation to the utility. It's what the ratepayers would lose as a result of that utility losing that license.

Senator **Johnston**. Do you find that in S. 426, that language?

Mr. **Sousa**. Well, it would be encompassed in "just compensation," because you would then be able to look at the case and see what exactly is lost here and how will we try to make them whole.

Senator **Johnston**. Well, that's what I'm getting at. When it says "just compensation"—let's see. Where is the phrase? Here it is. "Just compensation in an amount the Commission shall determine in accordance with due process of law." I think Commissioner Bagley said, and I would agree, that means due process of law as interpreted, and there are only two places I know of where that term is found, that is, in the fifth amendment or the 14 amendment, and there you don't have a concept of what the ratepayers owned before their license expired. The concept is what they own. And what they own when that license expires is some rocks and stones and machines. Do you see what I am driving at in terms of the ambiguity of that phrase?

Mr. SOUSA. I see what you are pointing at. If you take a narrow interpretation that all they own is, as you said, a bunch of bricks, and the structure, or whatever it is, and also the fact that they have already lost or are about to lose their license, then you could say that the value is not much; but the fact of the matter is, it is a very valuable resource which they would have to replace with something else.

Senator JOHNSTON. The license though is the thing that has the value, doesn't it?

Mr. SOUSA. The license does have value, yes.

Senator JOHNSTON. Commissioner Bagley, if I may just ask you some questions.

Mr. BAGLEY. Sure. Surely.

Senator JOHNSTON. I think it was in your testimony that you said "just compensation" here means due process as in the fifth amendment. Did I hear you correctly on that?

Mr. BAGLEY. I think there was a predecessor, but I am game, sir. I will play constitutional lawyer with you.

Senator JOHNSTON. What does the applicant own when his license expires and what is it worth?

Mr. BAGLEY. I agree with you, and I also agree with Tony Sousa. The law says depreciated value plus severance. I agree with you it is probably almost a minus value if you have to take the rocks and bricks away. The actual value—I have condemned some land and been involved in condemnation cases—you don't really have a fair market value in the sense of a willing buyer and a willing seller, although conceivably you could apply that test. Replacement value is one obvious test.

Senator JOHNSTON. But we didn't use that. I'm really focusing in on S. 426. That's not used here, is it? We are only using just compensation as interpreted in due process of law.

Mr. BAGLEY. I would think what Commissioner Sousa just alluded to would be an arena where FERC could operate. What would the ratepayers lose, and how do you best make that loss up to them? And, you know, if you had to——

Senator JOHNSTON. What would they lose by what? The failure to renew their license?

Mr. BAGLEY. By the failure to have hydropower available to them, as is the case that I did speak about. How do you measure that? In barrels of oil? And I am not being facetious.

Senator JOHNSTON. I understand that is what you want to do, but I submit that is not what these bills have done. And I think we ought to—I am really taking too much time here from my chairman, who has all these witnesses, but I think it is a key point of the bill. I think everyone who supports S. 426 thinks they have—they want to compensate the ratepayers for what they have lost, what they have lost being this dam or the right to operate it, the right to produce electricity, and I submit that S. 426 does not do that at all, because it is the expiration of the license that takes away the value.

Mr. BAGLEY. Let me respond very quickly. I will put my California PUC Commissioners hat on and just assume very quickly that depreciated value on the books of PG&E to be $100 million, the replacement value of capacity, not of that project itself, but of similar number of kilowatt capacity would be, let us say, $1 billion.

I would like to see $900 million flow not to PG&E but flow through PG&E to build a comparable project where that capacity could be replaced. The problem is, you cannot replace it. It is oil and gas that we are talking about. Fuel. That is the problem.

Senator JOHNSTON. Senator Evans I think has a concept like that in his bill that uses 50 percent.

Gentlemen, you have been excellent witnesses. Thank you very much.

Mr. BAGLEY. Thank you, sir.

Senator MURKOWSKI. Thank you.

Mr. BAGLEY. Let's us get out of here and let somebody else talk.

Mr. SOUSA. Mr. Chairman, I would just like to add one statement to Senator Johnston at the risk of opening up this question again. The four standards you have, if they are not exclusive, and just those four standards, then I think the FERC would benefit.

On the question of consistency, Mr. Chairman, I would suggest that both 403 and 426 are very consistent with what the Commission decided in *Merwin*.

Senator MURKOWSKI. Thank you very much, Commissioner.

Senator EVANS. Mr. Chairman, don't let Mr. Bagley get out of here before I have a shot at him. Senator Cranston is here——

Senator MURKOWSKI. Senator Evans has not had an opportunity to question the witnesses.

Why don't you proceed, and then we'll have Senator Cranston. Would you care to join us?

Senator EVANS. If you've got time problems, Alan, I'll defer for a few minutes if you want to go right now.

Senator CRANSTON. I do not want to interrupt anybody.

Senator MURKOWSKI. Senator, would you care to join us for a few moments?

Senator EVANS. I will take a few minutes.

First, Mr. Sousa, let me—and perhaps Mr. Bagley as well——

Senator MURKOWSKI. Mr. Bagley, we would like you to join us. I understand your reluctance to quit while you are ahead, but——

[Laughter.]

Mr. BAGLEY. It has been one of my major positions in life, sir.

Senator EVANS. Let me start with a couple of just kind of fundamental questions that do not really have anything directly to do with public or private preference or public or private license holders, but has to do, I guess, with fundamental concepts here.

Licenses were originally given for 50 years. I presume when a license holder acquired that license and built a dam they expected or should have expected nothing more than the opportunity to use that water for 50 years. Is that your understanding? Should they have expected anything more than that?

Mr. SOUSA. I would think that having had this resource and having used it, they would expect to have a renewal of that when the license expired.

Senator EVANS. Is there anything in the law that suggests that?

Mr. SOUSA. I don't believe there's anything, but they would be the first to ask for a renewal of the license, and the Commission has held that there shouldn't be any preference against the existing licensee.

Senator **Evans**. I am just talking fundamentally now about the whole question of when someone gets a license to operate for 50 years, should they—have they acquired anything more than the opportunity to operate for 50 years?

Mr. **Sousa**. The law doesn't provide for anything beyond the term, but being the operator of that I would expect they would want to have a renewal of the license.

Senator **Evans**. If you were an investor in a building which was built on a piece of property under ground lease, and the ground lease was for 50 years, would you expect that the person who owned the ground lease at the end of 50 years would give you preference necessarily in a new lease, or would they assume that you had had your shot, you depreciated the building, and they owned it?

Mr. **Sousa**. In my limited dealings with ground leases, I think there would be some provision for a renewal of one or two periods at perhaps a little higher lease rent.

Senator **Evans**. A little higher lease rent.

Mr. **Sousa**. Yes.

Senator **Evans**. What about Hong Kong? Britain received a 99-year lease from China. Do you think that they should have expected that that lease would be renewed?

Senator **Murkowski**. They get replacement value.

Mr. **Sousa**. As a matter of fact, Senator, I was born and raised in the British Colony of Hong Kong, and all land is owned by the Queen of the Crown and therefore for 99 years, and apparently there is a treaty here which would have allowed them to renew the treaty but with the expiration of the treaty, China wants the land back, and they are going to ignore the actual leases that are in effect there.

Senator **Evans**. Should anyone have really expected that that was going to—isn't it prudent business practice to assume that you've only got what you've got instead of expecting something that you don't have?

Mr. **Sousa**. I would say that you should make plans for what can take place upon the expiration of the lease, yes, you should make plans; but you would also try to put in there some provision for renewal or continuing of what you have.

Senator **Evans**. But that's not inherent in any of the current licenses? Is that correct?

Mr. **Bagley**. Senator, may I just add a sentence, because you called me back?

Senator **Evans**. Sure.

Mr. **Bagley**. We're talking really not about tradition here. We're not talking about the 1920's, obviously. You know better than I we are talking about Federal policy. There is obvious uncertainty here. What is the best solution? If you took a poll nationwide, it is 60 some-odd percent. In fact, the number is higher than that.

If you took a poll of the people affected on a policy sense, you would find rather obviously that those who would choose to have cheaper hydropower continue would say please continue our cheaper hydropower.

Senator EVANS. Of course they would.

Mr. BAGLEY. My point is simple. It's a question of public policy, not a question of who had what rights in 1920.

Senator EVANS. OK. Let me go on to Mr. Sousa. The next question, if today's circumstances and today's relative sophistication in power and abilities of the public and private utilities were as they were today back in 1920, do you think there would have been any—and the Power Act operated during the intervening years, do you think there would be any difference in the ratio of publicly owned and privately owned utilities vis-a-vis the dams that had been licensed in that period of time?

Mr. SOUSA. Let me see if I understand the question. You are saying that if we had today's conditions then when these licenses were issued?

Senator EVANS. In other words, in 1920, there was a concern on initial licensing that the investor-owned utilities at that time appeared to have great dominance and so there was a preference to publicly owned utilities, although many of the early licenses went to investor-owned utilities.

If we had current situations with the current strength and sophistication of publicly owned utilities, what would have happened in your view in those intervening years? Would there have been more of those licenses owned by publicly owned utilities than there are or not?

Mr. SOUSA. I don't believe so, unless there's a preference or a bias given in there to advantage one over the other. I would feel that they would compete for them just as fiercely and even more in today's climate.

Senator EVANS. If water is a public resource—I guess that is a fundamental question. Is it a public resource?

Mr. SOUSA. Yes.

Senator EVANS. If an existing licensee, whether public or private, has an overwhelming priority for relicensing, haven't you in doing that in essence assigned a public resource to a certain group among all the citizens of the country essentially in perpetuity?

Mr. SOUSA. I don't believe so.

Senator EVANS. Why not?

Mr. SOUSA. What we have here is a competition for the resource after the initial period; and as far as I know, if you don't give a preference to the municipal utility, they would compete for it, and whoever best serves the public, in other words, the most for most, the best for the most, they would get the license.

Senator EVANS. You have shown some inclination to support S. 426. In that bill in essence the existing licensee, unless they fail to meet the standards would get the license, so it isn't really competition except against a set of standards. Isn't that correct?

Mr. SOUSA. There is some question there as to whether that was intended by the framers or introducers of that bill. According to the introduction——

Senator EVANS. Wouldn't you say that that's a reasonable interpretation of the wording as it now exists?

Mr. SOUSA. That could be one interpretation, but my interpretation is that when you take, when you use the standard of best, it implies that you would have others that you should compare against to see which is the best. And I would think that that should be clarified.

Senator EVANS. It certainly should. It seems to me that it's probably pretty clear the way it is written, but it may not be what's intended. That refers back to the 10(a) criteria. The 10(a) criteria really depends upon the response to a comprehensive plan. Is there such a thing? Has the Corps of Engineers or has anybody else really developed the kind of comprehensive plan in most river areas or basins that have been contemplated after the passage of the 1920 act?

Mr. SOUSA. Well, the Commission staff attempts to come up with what would be the best or most comprehensive plan with the input from the applicants. With the assistance of the technical staff of the Commission they then have in mind what would be the best plan for that resource or for that area. As a matter of fact, we have also gone into specific areas now where there are plans for different river basins.

Senator EVANS. I have got a series of more particular questions which I will submit for the record, Mr. Chairman, in order to conserve time. Just one last one.

If Congress isn't able to resolve all of the economic impact and public interest tests in legislation before this committee, how would you feel, at least in the Pacific Northwest, about Bonneville and other power marketing administrations just picking up the licenses and selling the power back to customers in the region?

Mr. BAGLEY. I would like to answer that, but I will let Tony go ahead.

Senator EVANS. I will give you both a shot at that.

Mr. SOUSA. To the extent giving it to them and then reselling would mean additional cost of power to the consumer, I certainly wouldn't think that that is the way to go.

Senator EVANS. Well, wait a minute. The additional cost of power to which consumers?

Mr. SOUSA. To the ultimate consumer who had it in the first place.

Senator EVANS. I see. But how about the others who did not have it in the first place?

Mr. SOUSA. How would you—I don't quite see how that would come into play.

Senator EVANS. If Bonneville averages the cost, presumably the high cost consumer didn't have the benefit and would share in some of the benefits. It would tend to even out rates. I'm not suggesting this, incidentally. I'm just asking the question.

Mr. BAGLEY. I do not want to start a fight with Bonneville—or certainly with you. I do want to start a fight with Bonneville. In fact, we've got one going. We in California purchase some very inexpensive power, dumped power, power that would otherwise go out to sea for a penny or so. We are very grateful. Bonneville wants to charge us our avoided cost, which is 7 or 8 cents. They are willing to meet us in the middle somewhere.

Senator EVANS. I think that's reasonable. [Laughter.]

Mr. BAGLEY. The point being that any hydropower that we, the private customers, lose, even if you had no replacement of other capacity or no new facilities, the average cost to our private power consumers goes up. It's pure arithmetic.

Thank you, sir.

Senator EVANS. Well, I would suggest that we are not talking about the intertie or anything like that. I think that there is a clear case where both sides can win handsomely——

Mr. BAGLEY. That's right, and we're trying.

Senator EVANS [continuing]. And by reducing power costs. I might say, when you say it is in the middle, I only wish that it really were in the middle, so both sides had equal benefit from the exchange.

Mr. BAGLEY. I was oversimplifying.

Senator EVANS. Twenty-two isn't 35.

Mr. BAGLEY. Thank you, sir.

Senator MURKOWSKI. Thank you very much, Senator Evans.

We will call on Senator Cranston, who has been waiting for some time. Would you care to come before the table?

Senator CRANSTON. Certainly.

Senator MURKOWSKI. We certainly welcome you, Senator Cranston. We started at 10:00 o'clock. We have 33 witnesses. We have completed two of the witnesses, so we are going to be here for some time, thanks to Mr. Russ Brown, who has accommodated I'm sure everyone who wanted to speak. That's as it should be.

We have also heard from Senator Pete Wilson and Senator Denton this morning. We have had a good turnout of colleagues during the initial hour, and we look forward to your statement. We welcome you to the committee. Please proceed, Senator Cranston.

STATEMENT OF HON. ALAN CRANSTON, A U.S. SENATOR FROM THE STATE OF CALIFORNIA

Senator CRANSTON. Thank you very much, Mr. Chairman. I will be very brief in order to expedite your proceedings. I have a longer statement I will submit for the record.

Senator MURKOWSKI. It will be entered in the record.

Senator CRANSTON. I appreciate the opportunity to appear before you to testify in support of S. 426, the Electric Consumers Protection Act, which I am cosponsoring. This legislation, I believe, provides much-needed reform of the Federal Power Act, under which the Federal Energy Regulatory Commission issues licenses for the construction and operation of hydroelectric projects on the Nation's rivers.

Today investor-owned utilities hold 366 licenses for hydroelectric projects benefiting users in some 41 states. By 1994, 178 of these projects will need relicensing. The law, however, does not clearly state whether public utilities have preferential rights to this power in relicensing.

The result has been confusion, uncertainty, and conflicting administrative and judicial decisions. I believe this is a matter of sufficient public concern that Congress should make clear what the law is. S. 426 will make clear that the municipal preference clause does not apply to relicensing.

This ensures that the existing licensees will be able to continue to provide low-cost electricity to customers unless a competing applicant has a better plan to utilize the water resource in the public interest.

This issue is of great importance to my State. In California nearly 85 percent of the State's energy users are served by private utilities. Two of these investor-owned utilities have 50 licenses for hydroelectric power, 6 of which are already being challenged.

Their California consumers would face hundreds of millions of dollars annually in increased electric costs if the investor-owned utilities lost their licenses for inexpensive hydroelectric power and had to replace it with electricity generated by more expensive fuels or power purchased from others.

Looking just at the six projects now being challenged, the utilities would be forced to spend nearly $300 million more each year in fuel costs for equivalent generation based on 1983 dollars. That means about 7 million California households and commercial customers serviced by Southern California Edison and PG&E face a possible increase of $300 million in their electric bills.

I stress the $300 million increase. Additionally, such a changeover from the investor-owned utilities to municipalities may result in disruptions of integrated power systems, systems designed to achieve maximum use and conservation of water. For example, PG&E's Rock Creek Cresta project in California is one of several projects in the stairway of power on the north fork of the Feather River. If the municipality were to take over this project, the coordinated system would be seriously affected.

Since S. 426 was introduced in February, I have been getting over 100 letters a week from Californians who are worried about rate increases if investor-owned utilities lose their licenses to these hydroelectric projects. They urge passage of S. 426.

I appreciate your support as well, and urge early action by this committee to bring S. 426 to the Senate floor, and I thank you.

[The prepared statement of Senator Cranston follows:]

STATEMENT BY SENATOR ALAN CRANSTON
BEFORE THE SUBCOMMITTEE ON WATER AND POWER
COMMITTEE ON ENERGY AND NATURAL RESOURCES
REGARDING S. 426, THE ELECTRIC CONSUMERS PROTECTION ACT

June 11, 1985

Mr. Chairman, I appreciate this opportunity to appear before the Senate Energy and Natural Resources Committee Subcommittee on Water and Power to testify in support of S. 426, the Electric Consumers Protection Act, which I'm cosponsoring.

This legislation provides much needed reform of the Federal Power Act under which the Federal Energy Regulatory Commission issues licenses for the construction and operation of hydroelectric projects on the nation's rivers. Today investor-owned utilities hold 366 licenses for hydroelectric projects benefitting users in 41 states. By 1994, 178 of these projects will need relicensing. The law, however, does not clearly state whether public utilities have preferential rights to this power in relicensing. The result has been confusion, uncertainty and conflicting administrative and judicial decisions. I believe this is a matter of sufficient public concern that Congress should make clear what the law is.

S. 426 will make clear that the municipal preference clause does not apply to relicensing. This ensures that the existing licensees will be able to continue to provide low-cost electricity to their customers, unless a competing applicant has a better plan to utilize the water resource in the public interest.

I want to emphasize at the outset that this bill does not change municipal preference which exists during the inicial licensing. I believe our laws should continue to help local communities acquire their own sources of power -- but this should not be done at the expense of consumers in relicensing.

Mr. Chairman, this issue is of great importance to my state. In California, nearly 85 percent of the state's energy users are served by private utilities. Two of these investor-owned utilities have 50 licenses for hydroelectric power, 6 of which are already being challenged. Their California consumers would face hundreds of millions of dollars annually in increased electric costs if the investor-owned utilities lost their licenses for inexpensive hydroelectric power and had to replace it with electricity generated by more expensive fuels or power purchased from others.

Looking just at the 6 projects now being challenged, the utilities would be forced to spend nearly $300 million more each year in fuel costs for equivalent generation (based on 1983 dollars).

Additionally, such a changeover from investor-owned utilities to municipalities may result in disruptions of integrated power systems -- systems designed to achieve maximum use and conservation of water. For example, PG&E's Rock Creek/Cresta Project in California is one of several projects in the "stairway of power" on the North Fork of the Feather River. If a municipality were to take over this project, the coordianted system would be seriously affected.

S. 426 also provides that if a municipal utility takes over a hydroelectric project previously operated by an investor-owned utility there will be just compensation as determined by the Federal Energy Regulatory Commission. Under current law which provides that the original licensee be paid its net investment -- the original cost of the facility minus normal depreciation -- the investor-owned utilities may not be fully compensated. The costs of engineering and constructing plants 50 years ago bear no relationship to their actual value today. Using either capacity replacement costs or alternative fuel costs, the net investment standard is drastically inadequate.

I believe FERC should be allowed the discretion to determine the amount of compensation. I do not view such a provision as discouraging competition. Even with just compensation, a takeover should be attractive to a municipality in need of additional power because it would provide low cost electricity and an operating facility -- without construction delays and environmental problems.

I support amendments that environmentalists are recommending to the legislation to encourage environmental benefits and energy conservation. These amendments would specify criteria the Federal Energy Regulatory Commission must use in determining which of the competing applicants' comprehensive plans is best. Among other things FERC would have to consider: 1) utilization of the power potential of the waterway in relation to other beneficial uses including navigation, flood control, irrigation and recreation, 2) protection of fish, wildlife, natural, cultural, and recrational resources and mitigation of any adverse impacts on these resources 3) improvement of electricity consumption efficiency and 4) economic impacts on the public.

Without specifying these criteria, competition for hydroelectric licenses is likely to focus on increasing the power generating capacity of the facility at stake.

However, it's possible that competition may not be a factor in relicensing and that no competing application may be filed for many projects. I feel that all projects should undergo environmental scrutiny at the time of relicensing, whether or not the license is being challenged. Thus, I also advocate giving FERC the responsibility to require modifications of any projects necessary to ensure reasonable protection, mitigation or enhancement of fisheries and other resources and to improve electricity consumption efficiency.

Mr. Chairman, since S. 426 was introduced in February I have been getting over a hundred letters a week from Californians who are worried about rate increases if investor-owned utilities lose their licenses to these hydroelectric projects. They urge passage of S. 426. I appreciate your support as well and urge early action of this Committee to bring S. 426 to the Senate floor. Thank you.

Senator **Murkowski**. Thank you, Senator Cranston. I might advise you that we have received some 1,400 letters from your state in support of S. 426.

Senator **Cranston**. Good. [Laughter.]

I would be glad to help you answer them, if you wish.

Senator **Murkowski**. We will be glad to take you up on that. Thank you very much, Senator. We appreciate your coming and testifying and giving us your valuable input.

We would call now on panel No. 1. Panel one will include Mr. Frederick Mielke, Jr., chairman and chief executive officer of Pacific Gas and Electric, San Francisco; Mr. David Bolender, president, Pacific Power and Light, Portland, OR; Mr. John Terry, senior vice president, Niagara Mohawk Power Corp.; Mr. Walter Sandberg, director, government affairs, Wisconsin Public Service Corp.; and Mr. Jesse S. Vogtle, executive vice president, Alabama Power Co., Birmingham, AL.

Gentlemen, we welcome you to the Subcommittee on Water and Power. We look forward to your testimony. I would ask again that you keep your remarks to the allotted 5 minutes. We will maintain the time on your statements. You may proceed in any order you wish.

You are going to have to excuse me for a few minutes. I have some constituents from Alaska in the back room. I would ask Senator Johnston to take over for a few minutes.

Senator **Johnston** [presiding]. Please proceed, Mr. Mielke.

STATEMENT OF FREDERICK W. MIELKE, JR., CHAIRMAN AND CHIEF EXECUTIVE OFFICER, PACIFIC GAS & ELECTRIC CO.

Mr. **Mielke**. Thank you, Mr. Chairman, Senator Johnston. I will be the principal witness for this group of five. We have a coordinated presentation, and have divided the time up between us, so between the allotted time I will use more than 5 minutes. The others will make very brief added statements.

Senator **Murkowski**. Russ will keep track of the arithmetic.

Mr. **Mielke**. Fine; I of course as you know am chairman and chief executive officer of Pacific Gas & Electric Co. That is a regulated investor-owned company that serves over 3½ million customers and a population of about 10 million people in the northern two-thirds of California. I am also serving as the chairman of the Edison Electric Institute Committee on Hydroelectric Relicensing, and the member companies of that institute are all regulated investor-owned utilities, and they have licensed projects in some 32 States and serve the federally licensed power to citizens in some 41 States.

I am here to speak in support of S. 426 by Senator Wallop and 27 coauthors. The issue it presents is simple. It is national in scope. And it is purely and simply a consumer issue. I say a consumer issue because the sole issue on which this should be decided in my view is Federal policy as to whether one group of consumers should be favored over another group of consumers because of the mere circumstance alone that the second group of consumers is served by a municipally owned utility.

Now, by 1994 some 177 of these hydroelectric projects I mentioned will come up for relicensing, and the municipalities are asserting a so-called preference under the Federal Power Act of 1920 to take over 11 of those projects thus far. Four of those projects are on the system of my company. If we were to lose just those 4 projects, and bear in mind we have 66 hydroelectric powerplants on our system, it would cost our consumers over $140 million each year, annually, in increased costs.

It is important in assessing the impact of these municipal takeover attempts that you understand one basic principal of ratemaking. Under rate regulation, regulated utilities earn a return only on invested capital. They earn no return whatever on fuel costs or any return on their fuel cost savings. So the falling water in their hydroelectric projects is a zero-cost fuel to them and their customers. If they lose that zero-cost fuel, the utilities must replace it with coal, oil, gas, or some other expensive fuel, the added cost of which must then be added to the consumer in higher electric rates.

The savings from that zero fuel cost runs into billions of dollars each year nationally, and that savings flows directly to the millions of electric consumers. The customers served by licensed hydroelectric projects have paid for those projects in their rates over the years.

They certainly should not have the benefit of those projects which they have essentially paid for by the time the licenses have expired, and have that benefit transferred to another group of consumers at relicensing time merely because of the circumstance that the second group of customers happens to be served by a municipal utility.

Any such treatment is grossly unfair. It will cost billions of dollars in higher rates to the very people these projects were built to serve, namely, those utility customers. As I emphasized in testimony last year over in the House of Representatives, and I repeat it here, the identity of interest between the utility companies and their customers on this issue cannot be broken. We are united; it is 100 percent the same interest.

Now the inequity of allowing such takeovers on the claim of preference should be a matter of concern to you. Municipal and State utilities serve only about 14 percent of the electric customers in this country. The regulated utility companies serve about 76 percent. The great majority of American consumers therefore will be adversely affected if muncipalities are allowed to prevail in their claim of reference to these projects which have been built by regulated utilities and paid for by their customers over the years.

The inequity is even worse when you consider that the regulated utilities which serve the bulk of the customers have less than 32 percent of the Nation's hydroelectric generation, and you will see a chart posted over to your right, the two pie-charts, and you will see that although the investor-owned utilities serve 76 percent of the customers in the Nation, they have only 32 percent of the hydroelectric generation of this Nation.

State and municipal utilities, on the other hand, serve only 14 percent as shown, and because these 14 percent already have preferential access to 68 percent of the Nation's hydroelectric generation, there is a great disparity. And of course that preference arises because first of all they have a preference for initial licensing, original licenses, and second, they have preferences to purchase cheap hydroelectric power from Federal projects.

So the point is that this existing inequity certainly should not be added to by giving still another preference to this already preferred group of customers.

Now I would like to give you an example, a real life example, of what that kind of preference to a preferred group of customers means. In our service area, the city of Palo Alto, because of its preferred access to Federal power, gets 100 percent of its power from Federal dams. As a result, their rates are half of what PG&E's rates are. Their rates could be even lower, because one-third of what they charge their customers, they don't need for the cost of the electricity. They pay it back to the city treasury in lieu of taxes.

Now just across the freeway from Palo Alto, a much less affluent community, East Palo Alto, largely black, has rates twice as high as Palo Alto. The East Palo Altoans get their proportional share of hydropower and no more, the PG&E share, yet Palo Alto is one of those municipalities seeking to take over two of our hydroelectric projects adding further to their benefit at a cost of increasing the rates to those citizens in East Palo Alto and all our other customers.

Just further south in Santa Clara in the heart of Silicon Valley, Santa Clara—one of the witnesses here will be from Santa Clara—gets over half of its power from Federal dams, and as result their rates are about one-third less than our rates.

It is not surprising that they have built up a large industrial base there in Silicon Valley. Some 80 percent of their base is industrial load. They are going after our entire McColomey River hydroelectric project, and, in fact, a number of those industrial customers have actually offered to finance the battle for takeover by Santa Clara so that, as they put it, Santa Clara could "capture this facility" for their own use.

Now I won't review how we got here. That has been done with other witnesses. But we have reached a point, and I think it is plain, where Congress should act. This is a matter of policy which should not be left to the vagaries of Commission and court decisions trying to figure out what Congress did or did not mean in 1920. The issue is what is sound Federal policy now, in present day circumstances, not necessarily in circumstances that prevailed in 1920.

This sound Federal policy would be created by S. 426. S. 426 makes it clear that existing hydro project licensees, including municipal original licensees, would receive new licenses for their projects unless the FERC determines that their plans are not "best adapted" to manage the resource. That decision would be made in light of all relevant public interest factors, including the consideration of competive applications for the relicense. All applicants would thus be judged directly against the public interest criteria under Section 10(a) of the Act.

This process of evaluating whether an existing licensee's plans or those of some other applicant were best adapted would involve participation by the competing parties, by the FERC staff, a multitude of Federal and State agencies, by environmental intervenors and anyone else asserting an interest in the matter.

Under S. 426, if a competitor shows it can do a better job, the project and its benefits will be taken away from the existing licensee and its customers. So while it sets a fair and appropriate standard, S. 426 still leaves the way open for any competitor convinced it can do a better job.

Now let me turn to the other extremely important matter raised by S. 426. That is the issue of compensation to be paid for a hydroelectric project if it is taken over by a competing applicant in the relicensing process. Under present terms of the Federal Power Act, the existing owner of the project would receive only the net investment in the project. That is, the historical cost depreciated.

In the *Merwin Dam* case, for example, it was found that under this statutory measure of value, the present owner of the project would have received less than $9.5 million for the project if it were taken over, yet it would have cost between $730 million and $830 million for the owner to build a replacement coal fired power plant to replace the energy lost from the taken over hydroelectric plant.

The inequity in permitting another entity to take over a valuable hydroelectric project for a payment so far below its true value seems obvious. At the time of relicensing, the customers for whom the plant was originally built have largely paid off the cost of the plant through their rates over the years. When they have almost completely paid for the plant, why should another group of consumers be permitted to shove them aside and take over the plant without paying just compensation for it? It is interesting that all the bills before you save one recognize the inequity of allowing a takeover without fair compensation for it.

It is interesting to note that to correct this inequity of this inadequate standard of compensation, the net investment rule, the municipalities themselves came to Congress in 1953 and got the Federal Power Act changed as it applies to a takeover of their facilities by the U.S. Government at the time of relicensing. Congress agreed that just compensation was needed, and enacted Public Law 278 in the 83d Congress.

This law made inapplicable the net investment measure of compensation whenever the Federal Government takes over a hydro project of a municipal utility upon expiration of the original license. As a result, today a municipality would receive just compensation as guaranteed by the due process clause of the Constitution if one of its projects is taken over on a relicensing.

Certainly the same equitable treatment should be given to customers of investor-owned utilities. Certainly customers served by regulated utilities should not be treated as second class citizens as compared to municipal utilities on this issue of just compensation.

In closing, I would just comment that the support for S. 426 is broad. It is bipartisan. It runs from the National Association of Regulatory Utilities Commissioners, to labor unions, to cities and counties, to farm organizations and national senior citizens' organizations. We have the support of the National Association of Counties, the National Conference of State Legislators, the American Association of Retired Persons, the National Council of Senior Citizens, the American Farm Bureau, and the Building and Construction trades of the AFL-CIO.

Clearly that support makes it plain that the consumer interest is speaking in support of S. 426. It is the consumer interest of at least 76 percent of the electric customers in this country. I urge you to pass this legislation in the consumer interest of our customers.

Thank you.

[The prepared statement of Mr. Mielke follows.]

STATEMENT OF

FREDERICK W. MIELKE, JR.

Pacific Gas and Electric Company

Before The

SUBCOMMITTEE ON WATER AND POWER

of the

SENATE COMMITTEE ON ENERGY
AND NATURAL RESOURCES

ELECTRIC CONSUMERS PROTECTION ACT: S. 426

Hearing: June 11, 1985

Mr. Chairman and members of the subcommittee, my name is Frederick W. Mielke, Jr. I am Chairman and Chief Executive Officer of the Pacific Gas and Electric Company. I also serve as chairman of an Edison Electric Institute inter-company committee on hydroelectric relicensing. In both capacities, I would like to thank you for the opportunity to be with you today. Hydro relicensing is an issue of enormous importance to the millions of American consumers now benefitting from utility company hydroelectric projects.

Before describing the background that has made enactment of S. 426 so important to utility company customers everywhere -- I would like to make a couple of things clear at the outset.

First, hydro relicensing is a consumer issue -- pure and simple. The hydroelectric plants we built to serve our customers produce electricity without burning fuel. Utilities earn no return on fuel costs or fuel savings. All of hydro's savings are passed directly to our customers. Utility company hydro projects subject to federal relicensing provide consumers with about $3.5 billion in fuel cost savings alone every year. All those savings are at risk when municipally-run utilities claim a relicensing "preference" over existing hydro licensees and their customers.

Second, this is not a fight that our customers, a majority of this country's electric consumers, started or provoked. Utility company customers aren't seeking to take anything away from anybody. But faced with direct relicensing attacks, conflicting "preference" decisions, and an antiquated and inadequate pricing standard -- they've come to Congress seeking reasonable protection for what they paid to create.

Finally, S. 426 is very specific, very limited legislation. It is confined exclusively to the relicensing of existing hydroelectric plants. It makes no change whatever in the initial licensing "preference," the power marketing preferences, or any of the other advantages currently enjoyed by municipally-run electric systems. S. 426 would require someone tying to take a project away from an existing licensee and its customers to show a better proposal and to pay a fair price. That's all.

With that introduction, I would like to describe in more detail how relicensing became such a problem and why S. 426 is so important to so many consumers.

Hydro

Utility companies, their investors, and their customers pioneered hydroelectric development. In northern California, hydro power production began before the turn of the century -- first using flumes built to carry water to the gold fields, then creating dams and power plants in high mountain canyons, driving tunnels through miles of granite, and building some of the first long distance transmission lines in the world. The same pattern of accepting challenges at the edge of existing technology was repeated by other companies -- all across the county.

Beginning in 1920, with passage of the Federal Power Act, more and more hydro development took place under federal license. Eventually federal licenses, renewable after fifty years, came to cover virtually every plant.

Today, nationwide, regulated utility companies hold federal licenses for 366 hydroelectric projects. Attached to my testimony as Table 1 is a list of those projects, giving their locations, vital statistics and license expiration dates. Even that lengthy list fails to convey the magnitude of the work represented in those licenses. For example, PGandE's 29 project licenses actually cover 64 operating power plants and nearly 180 dams and reservoirs.

These projects have been extended, modernized and improved as the public's need for electric power grew. In fact, over 60 percent of my company's hydro capacity has been installed just since 1955.

In 1983 utility company hydro projects delivered more than 90 million megawatt-hours of low cost energy every year to some 40 million homes, businesses and farms located in 41 different states. Benefits passed on through sales to others reach 5 more states and 6 million more households and places of businesses. All in all, over 114 million people now benefit from utility company hydro projects. A map of the United States, attached to this testimony as Figure 1, shows the distribution of these projects.

I appear before you today representing our customers -- the people we serve; the people our hydro projects were built to benefit. Throughout all the years we've had hydro, our customers have been paying for it. In return, they benefit from facilities whose rate expense is now very low and whose fuel cost savings, the real prize in hydro, goes directly to them. As I emphasized last year in testimony over in the House of Representatives -- the identity of interest between utility companies and their customers on this issue cannot be broken.

"Preference"

The present language of the Federal Power Act relating to hydro project relicensing and "preference" has created a great deal of argument and litigation. In 1968, the agency charged with interpreting the Act (then the FPC) specifically informed Congress that, while the Act did provide a "preference" for government-run utilities in the initial licensing of hydro projects, no "preference" would apply against a project's owner when it came time to relicense an existing project.

In the 1970's, in step with the OPEC embargo and the fuel cost increases it created, municipally-run utilities began viewing hydro relicensing as a potential money maker worth going after. In 1980, the Federal Energy Regulatory Commission (FERC) reversed the FPC's earlier statements to Congress in the City of Bountiful case, later affirmed by a Court of Appeals that gave the agency "great deference."

In September of 1983, faced in the Merwin case with its first actual relicensing choice, FERC reversed itself and returned to the view that municipal "preference" does not apply against an original licensee and its customers. The municipal utilities have now appealed the Merwin decision. The Court of Appeals has not yet acted.

The Act has now been interpreted first one way, then another, then back again. No one can be sure how the language will next be construed by the Commission or by the courts. In the meantime, initial license terms are running out on more and more projects.

Eleven municipal takeover attempts are currently on file at FERC. All in all, 177 project licenses will be coming up for renewal in just the next 10 years. If these relicensings are to be conducted on a fair and equitable basis, the Act needs amendment now.

The Public

Those municipal electric systems that have chosen to attack utility company projects argue that this is a "public versus private" fight -- calling themselves "public" power. But that misstates the facts.

Nearly ten million people benefit if PGandE retains its Mokelumne Project; less than 90,000 benefit if the City of Santa Clara takes it. PGandE and its customers represent "the public" -- not the City of Santa Clara. In the 11 cases now pending at FERC, the utility companies serve 9 times as many customers as their municipal utility opponents. The

114 million Americans who now benefit from utility company hydro projects are the public.

In northern and central California , 138 cities, 37 counties and over 8,000 businesses, civic groups, unions, farm organizations and citizens have now formally endorsed PGandE's efforts to defend its hydro projects against municipal utility "preference" claims. In southern California, 118 cities, 14 counties, 2,304 organizations and some 20,013 individuals have gone on the record as backing the Southern California Edison Company in its struggle against hydro takeovers. The principle of providing utility company customers with needed protection from takeover raids has won support in more than 100 newspaper editorials nationwide. Table 2 to my testimony gives a few samples of that support. A distinguished list of the nation's great governmental, labor, business, agricultural, and consumer organizations have acted to support utility companies and their customers on this issue. Those organizations are shown in Table 3.

The Privileged

The municipal utility systems that started this relicensing fight have more than their fair share of hydroelectric power. Attached to my testimony as figure 2 is a chart illustrating the fact that while municipal and state-run utilities serve only about 14 per cent of the country's electric consumers, they have preferred access to 68 per cent of the nation's hydropower resources. While utility companies serve 76 percent of the customers, those customers must get by with only 32 percent of the hydro. If municipal and state-owned utilities are also accorded preference on relicensing, it would amount to a judgment that this privileged minority should control all the country's hydro resources.

I'd like to give the Committee a couple of examples of what the special privileges enjoyed by municipally run utilities mean in real life.

The City of Palo Alto, California, satisfies just about all its needs with its preferred access to low cost hydro power from federal projects. Even after diverting about one-third of its electric system's revenues into the city's general fund, Palo Alto's rates are about one-half of

PGandE's. While the citizens of Palo Alto (one of the most affluent communities in California) enjoy bargain basement electric rates, PGandE serves East Palo Alto (one of the least affluent communities in California) right across the freeway. Palo Alto's municipal utility is now a major participant in a consortium seeking to grab the benefits of our Rock Creek-Cresta and Haas-Kings River Projects away from PGandE customers in East Palo Alto and throughout northern California. A little farther south, the City of Santa Clara gets over half of its power from federal projects -- producing rates about one-third lower than ours. It is not surprising that with those low rates, Santa Clara's electrical load is now 80 per cent industrial -- a portion of the city's load that has grown some 1200 per cent since 1963. Santa Clara now seeks to take over PGandE's entire Mokelumne River Project and, at one point, some of its industrial customers offered to finance the contest on behalf of Santa Clara!

The City of Bountiful, Utah, is another city drawing most of its power from its preferred access to federal projects. Bountiful has rates one-third lower than Utah Power & Light Company's and, predictably, Bountiful's residential customers use an average of 60 per cent more electricity a year than do UP&L's. Bountiful has played a major role in the current relicensing controversy through its attack on UP&L's Weber Project (the "City of Bountiful" case).

Municipally-run utilities quite obviously constitute a privileged class. But I've pointed that out in this testimony only to underline the unfairness of providing them with further advantages at the expense of our customers. We firmly believe that any government-owned utility that wants to take over someone else's project should be required to prove it can do a better job and should be required to pay just compensation for the project taken. But that poses no threat to the municipal utilities' long list of existing special privileges. The legislation proposed here is confined to one small area -- hydro relicensing. Not one municipal utility customer pays more if S. 426 passes -- but if S. 426 does not pass, our customers, the real "public," will be at risk for enormous potential losses.

The Stakes

As I stated at the outset, utility company customers now rely on our projects for something on the order of $3.5 billion a year in fuel cost savings. See Table 4. The cost to construct major thermal facilities equivalent to the capacity now represented by utility company hydro plants would be another $17 billion to $86 billion. See Table 5.

Looking only to the fuel costs for equivalent generation, the value to consumers of just the 11 projects already under relicensing attack comes to $307.9 million a year. See Table 6. My own company, PGandE, estimates the direct rate impacts on our customers of losing only the four projects of ours which are already under attack at more than $140 million a year. See Table 7.

The municipal utilities' campaign to grab our customers' hydro benefits reaches a real low point when they try to argue away the consequences of their intended deeds. In last year's House testimony, a witness for one of the municipal utilities argued that Congress shouldn't concern itself with relicensing -- claiming that PGandE's customers' would only lose $18 million a year if we lost the three of the projects now in contest. The "study" submitted as supporting that $18 million number, among other things, claimed there would be no impacts from a hydro takeover by a city that had previously enjoyed wholesale customer status. That is nonsense. After a takeover by a wholesale customer, our other customers get stuck with a higher proportion of thermal fuel costs; our other customers must carry alone those system costs formerly shared with the wholesale customer; and our other customers must bear the cost of replacing the plant when the remaining load grows to need it. The "study" produced by the municipal utilities, as discussed in Appendix B to this testimony, understated the damage to PGandE's customers by more than 700 percent.

Such efforts of municipal utilities to disguise the consumer consequences of their takeover plans speak eloquently of the danger facing our customers if relicensing contests are not promptly put on a basis that will (1) reasonably protect existing project customers and (2) require adequate compensation for any lost project. That is precisely -- and solely -- what the Electric Consumers Protection Act of 1985, S. 426, proposes to do.

The Answer: S. 426

Using the standard now set out in Section 10(a) of the Act, S. 426 requires a competitor to show that the existing owner will not provide the project best adapted to develop the water resource and permit its comprehensive use in the public interest. That proof could be made by any competing applicant demonstrating a superior plan. By also requiring the Commission to consider benefits provided during the preceding license term, S. 426 assures that the hard work that went into creating and maintaining the project for all those years will not be ignored.

The second major element in S. 426 is its change in the price to be paid from a basic "net investment" (book value) price to "just compensation."

Much has changed in the 65 years since 1920 when the "net investment" price was established. In 1920 public utility regulation was still in its infancy. Many states still hadn't even established public utilities commissions. The industry was still characterized by a large number of small, relatively inefficient, companies serving individual communities or even parts of the same community. Much of the thinking about hydro development was characterized by what I will call a "one plant/one town" view, with one project on the rapids (or the "shoals") seen as serving only an adjacent community. Relicensing struggles, to the extent they were envisioned at all, would have been seen as largely taking place between organizations competing to serve the _same_ town -- with no shift in consumer benefits. As it turned out, utility companies developed into great interconnected systems. Our hydro plants now typically provide their benefits to an entire region instead of any one community. In today's relicensing situations, the project's _customers are the big potential losers_.

In 1920 it would also have been nearly impossible to imagine the magnitude of consumer harm now threatened by "net investment." As FERC put it in the Merwin case:

> "The 'net investment' concept was designed in a period of wartime inflation when it was generally believed that inflation was a cyclical and temporary matter, to be followed by deflation ... Certainly the members of Congress in 1920 would not have foreseen the near constant inflation spanning the half-century following 1933 that has placed such great dollar values on privately owned hydroelectric facilities and made them such a bargain at cost-based relicensing prices."

The immense inequity of the "net investment" measure of compensation was well illustrated in the Merwin case. Under the Administrative Law Judge's initial decision, the existing licensee and its customers would only have received $9.4 million for a project with a replacement or alternative power cost estimated at between $730 and $830 million. What a windfall!

It is against this background of dramatic change and present inequity that S. 426 proposes to set "just compensation" as the price for third-party takeovers. I want to make it absolutely clear, as I did in my testimony in the House last year, that our customers' well-being is our paramount concern and that any amount over "net investment" will be dedicated to the benefit of those customers.

The municipal utilities have argued that setting a just compensation price is inconsistent with the rights of the federal government. But the federal government's own right to acquire a utility company project at "net investment" under Section 14 of the Act will not be changed at all. The reform proposed in S. 426 affects only third-parties -- complete strangers to the projects and to the work that created them.

The municipal utilities' arguments against just compensation ring false when we consider that in 1953 those same municipal utilities secured an amendment to the Federal Power Act that stripped the federal government itself of all power to acquire any of their licensed hydro projects for "net investment." Act of August 15, 1953. 16 U.S.C. § 828-828c. We can understand why the municipal utilities -- and presumably Congress -- found the "net investment" measure intolerable, even to the extent of forcing the government itself to pay just compensation. What we can't understand is how they can now argue, with a straight face, that the "net investment" measure should be imposed on our customers.

The municipal utilities, unable to characterize "net investment" as a fair price under today's circumstances, fall back on simply arguing that they "won't play" if required to pay just compensation. In other words, they say they won't compete. That's pretty hard to square with their claim to need more hydro plants. If a person needs a given product, he or she expects to pay what it's worth. That's true whether we're buying houses, cars, or turbines for power plants. Municipalities must pay just compensation to any citizen in order to take a home or a business property for public use. Just compensation, in short, will be no barrier for any utility that actually needs a new generating resource to serve its customer load.

Utility companies have no quarrel with competition based on fair value. When our competitors must pay for proposed improvements from their own pockets, instead of from the "net investment" windfall, then we will have a fair contest. Right now municipalities can, in effect, bid with our customers' money. The result is extreme pressure to install excessive or unnecessary "improvements" -- to the obvious detriment of both the environment and the consuming public. With just compensation, both sides will have to weigh the cost consequences of their proposed actions.

About a year ago, I spoke at the formal dedication of PGandE's Kerckhoff II hydroelectric improvement project. I wish all of you could have been with me to see the work that went into adding nearly five miles of new tunnel, an entire underground powerhouse, and 533 million kilowatt-hours a year of additional generation to a project that was being relicensed, but was not being "competed" for. Kerckhoff II told the real story of project improvement. We don't need the threat of a rate disaster for our customers to bring forth needed improvement.

Utility company project owners have long been particularly sensitive to environmental concerns, since it is our customers who use and enjoy the amenities of our projects. The hydro utilities' record of environmental concern and accomplishment is second to none. PGandE alone has negotiated 15 separate cooperative agreements with state and federal environmental agencies relating to the operation of our hydro facilities. Utility company licensees nationwide have provided access to lakes and rivers, improved fish and wildlife habitats, participated in major wild life protection and enhancement programs, and provided campsites and sanitary facilities throughout project watersheds.

It's important to remember that every project relicensing is "competitive" -- whether or not there is someone trying to take the project away. Because Section 15 of the Federal Power Act gives FERC full authority to impose new terms and conditions on a relicensed project, our cases are tested, and tested hard. The companies, FERC staff, the Interior Department, the U. S. Fish & Wildlife Service, the U. S. Forest Service, our State Fish & Game Departments, State public service commissions and energy commissions, environmental groups, local citizens and the public all compete to secure license terms and conditions that best suit their views of how the project should be constructed and operated. That competition will continue regardless of how municipal utilities and others weigh their actual needs against a fair price.

S. 403

S. 403 addresses the public interest standards to be applied in relicensing in somewhat greater detail than S. 426. The various public interest criteria set out in S. 403 seem already encompassed in S. 426 by its general reference to Section 10(a) found in S. 426.

S. 403 does make it clear that existing licensees and their customers will retain their projects unless someone else proves they can do a better job. (new Section 15(a)). We agree. However, S. 403 does not propose to require a new licensee to pay just compensation for a project it acquires -- and there I must respectfully disagree with it. For the reasons already stated, "net investment" simply cannot be defended in terms of fairness to the consumers who must suffer if a project is lost.

S. 1219

With all due respect to Senator Metzenbaum, his bill, S. 1219 would be a long step backward for the millions of American consumers now benefitting from utility company hydroelectric plants built to serve them. The provisions of S. 1219 all revolve around a fundamental plan to actually create a relicensing preference for municipally-run utilities over utility companies and their customers! That is exactly the reverse of what should be done. Further, the "antitrust" and "transmission" features of the bill, open up highly debatable subjects that needlessly pose even further threats to existing customers of investor-owned utilities.

Conclusion

Our customers, the great majority of American consumers, need your help in hydro relicensing. And they need it now. Please give them that help with your approval and endorsement of S. 426. Thank you.

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# TABLES
for
STATEMENT OF
FREDERICK W. MIELKE, JR.

June 11, 1985

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TABLE 1
LICENSED UTILITY COMPANY HYDROELECTRIC PROJECTS

State[1] Company	Project Name[2]	License No.[2]	License Expiration Date[3]	Installed Capacity (Nameplate Megawatts)[4]	Generation (Megawatt-hours)[4]	County[5]	States Served[6]
Alabama (9)							
Alabama Power Company	John H. Bankhead	2165	8/31/2007	202.600	619,032.000	Tuscaloosa Cullman Walker	AL
	Coosa River	2146	7/31/2007	691.000	2,792,519.000	Elmore Chilton Coosa St. Clair Talladega Calhoun Cherokee	
	Holt Lock and Dam	2203	8/31/2015	40.000	194,024.000	Tuscaloosa	
	Jordan	618	7/31/2007	100.000	245,490.000	Elmore	
	Martin Dam	349	6/08/2013	154.200	514,869.000	Elmore Tallapoosa	
	Mitchell	82	7/31/2007	72.500	397,296.000	Chilton Coosa	
	R.L. Harris	2628	11/30/2023	135.000	125,585.000	Randolph Clay	
	Thurlow	2408	12/31/1993	58.000	327,167.000	Elmore Tallapoosa	
	Yates	2407	12/31/1993	32.000	184,631.000	Elmore Tallapoosa	
				1,485.300	5,400,613.000		
Alaska (2)							
Alaska Electric Light and Power	Salmon Creek and Annex Creek	2307	8/31/1988	9.100	41,601.600	Juneau Div.	AK
Alaska Power and Telephone, Inc.	Skagway Dewey	1051	8/29/2007	0.765[7]	2,440.000[7]	Skagway-Yakutat Div.	AK
				9.865	44,041.600		
Arkansas (1)							
Arkansas Power & Light Company	Carpenter and Remmel	271	2/28/2003	65.300	201,375.000	Hot Spring Garland	AR/MO
				65.300	201,375.000		

State[1] Company	Project Name[2]	License No.[2]	License Expiration Date[3]	Installed Capacity (Nameplate Megawatts)[4]	Generation (Megawatt-hours)[4]	County[5]	States Served[6]
California (51)							
Pacific Gas and Electric Company	Angels	2699	12/31/1995	1.400	8,247.000	Calaveras	CA
	Balch No. 1 & 2	175	4/30/2026	128.200	1,106,885.740	Fresno	
	Bucks Creek	619	10/31/2004	66.000	416,811.300	Plumas	
	Chili Bar	2155	7/31/2007	7.020	59,195.000	El Dorado	
	Crane Valley	1354	4/30/1989	20.900	196,201.400	Madera Fresno	
	De Sabla-Centerville	803	10/11/2009	24.850	210,016.750	Butte	
	Drum-Spaulding	2310	4/30/2013	163.853	1,101,612.090	Nevada Placer Sutter	
	El Dorado	184	2/23/2002	20.000	36,858.728	El Dorado	
	Haas-Kings River	1988	3/31/1985[8]	179.100	1,394,240.650	Fresno	
	Hatcreek No. 1 & 2	2661	9/30/2000	20.000	121,338.445	Shasta	
	Helms Pumped Storage	2735	4/30/2026	-	-	Fresno	
	Kerckhoff	96	11/30/2022	173.580	786,554.270	Fresno	
	Kern Canyon	178	4/30/2005	8.480	82,164.000	Kern	
	Kilarc & Cow Creek	606	3/27/2007	4.440	41,450.000	Shasta Kings	
	McCloud-Pit	2106	7/31/2011	338.400	2,264,876.215	Shasta	
	Merced Falls	2467	2/28/2014	3.440	25,296.000	Mariposa	
	Battle Creek	1121	7/31/2026	36.200	312,848.900	Shasta Tehama	
	Mokelumne	137	11/23/1975[9]	192.750	1,528,064.073	Amador Calaveras	
	Narrows	1403	7/31/1991	9.350	83,617.000	Yuba	
	Phoenix	1061	12/25/1980[10]	1.600	16,130.000	Tuolumne	
	Pit No. 3, 4, & 5	233	10/31/2003	310.750	2,466,435.240	Shasta	
	Pit No. 1	2687	12/31/1995	56.000	415,331.117	Shasta	
	Poe	2107	9/30/2003	142.830	940,142.400	Butte	
	Potter Valley	77	4/14/2022	9.040	65,397.000	Mendocino	
	Rock Creek-Cresta	1962	9/30/1982[11]	180.900	1,410,269.000	Plumas Butte	

State[1] Company	Project Name[2]	License No.[2]	License Expiration Date[3]	Capacity (Nameplate Megawatts)[4]	Installed Generation (Megawatt-hours)[4]	County[5]	States Served[6]
	Stanislaus-Spring Gap	2130	12/31/2004	87.900	522,526.700	Tuolumne Calaveras	
	Tule River	1333	4/30/1989	4.800	46,923.000	Tulare	
	Upper No. Fork Feather River	2105	10/31/2004	338.700	2,338,805.586	Plumas	
	Utica (Murphys)	2019	11/05/1996	3.600	29,603.000	Calaveras	
Pacific Power & Light Company	Klamath	2082[12]	2/28/2006	151.000	1,059,866.000	Siskiyou	CA/ID/MT OR/WA/WY
Southern California Edison Company	Big Creek No. 1 & 2	2175	2/28/2009	127.750	1,231,872.748	Fresno	CA
	Big Creek No. 2A & 8	67	2/28/2009	138.500	1,253,008.880	Fresno Madera	
	Big Creek No. 3 & 6	120	2/28/2009	142.950	1,366,533.200	Fresno	
	Big Creek No. 4	2017	2/28/1999	84.400	762,458.170	Fresno	
	Bishop Creek	1394	11/30/1986	24.700	205,193.450	Inyo	
	Borel	382	2/28/2005	9.200	86,921.986	Kern	
	Kern River No. 1	1930	4/30/1996	27.800	197,426.593	Kern	
	Kern River No. 3	2290	12/31/1993	32.000	283,425.220	Kern	
	Kaweah	298	8/06/1974[13]	6.900	65,541.941	Tulare	
	Lake Tho. A. Edison	2086[14]	8/31/2003	-	-	Tuolumne	
	Lower Tule	372	6/14/2000	2.000	22,692.600	Tulare	
	Lundy	1390	11/30/1986	3.000	14,861.040	Mono	
	Lytle Creek	1932	4/30/1996	0.400	4,152.185	San Bernadino	
	Mammoth Pool	2085	11/30/2007	130.300	1,225,983.800	Fresno	
	Mill Creek No. 2 & No. 3	1934	4/30/1996	2.000	18,747.120	San Bernadino	
	Poole	1388	11/30/1986[15]	10.000	46,143.302	Mono	

State[1] Company	Project Name[2]	License No.[2]	License Expiration Date[3]	Installed Capacity (Nameplate Megawatts)[4]	Generation (Megawatt-hours)[4]	County[5]	States Served[6]
	Portal	2174	3/31/2005	10.000	45,924.290	Fresno	
	Rush Creek	1389	11/30/1986[16]	8.400	67,639.740	Mono	
	San Gorgonio	344	4/26/2003	2.300	6,867.817	Riverside	
	Santa Ana No. 1 & No. 2	1933	4/30/1996	4.000	33,013.237	San Bernadino	
	Santa Ana No. 3	2198	4/30/2009	1.200	11,549.800	San Bernadino	
				3,452.883	26,037,663.723		
Colorado (4)							
Public Service Company of Colorado	Boulder Canyon	1005	8/31/2009	20.000	20,000.000	Boulder	CO
	Cabin Creek	2351	2/28/2014	300.000	108,522.000	Clear Creek	
	Georgetown	2187	12/31/1993	1.000	6,683.600	Clear Creek	
	Salida Hydro No. 1 & No. 2	2275	12/31/1993	2.000	7,790.000	Chaffee	
				323.000	142,995.600		
Connecticut (3)							
The Connecticut Light and Power Company	Falls Village	2597	8/30/2001	9.000	42,581.420	Litchfield	CT
	Housatonic	2576	7/31/2001	74.900	240,468.755	Litchfield	
	Scotland	2662	8/31/2012	2.000	8,860.000	New London	
				85.900	291,910.175		
Georgia (11)							
Georgia Power Company	Bartletts Ferry	485	12/14/2014	65.000	432,954.782	Harris	GA
	Chattahoochee	2177	12/31/2004	116.000	633,468.480	Macon	
	Flint River Res.	1218	9/30/2001	5.000	28,922.000	Dougherty	
	Langdale	2341	12/31/1993	1.000	5,240.000	Troup	
	Lloyd Shoals	2336	12/31/1993	14.000	40,205.050	Butts	

State[1] Company	Project Name[2]	License No.[2]	License Expiration Date[3]	Installed Capacity (Nameplate Megawatts)[4]	Generation (Megawatt-hours)[4]	County[5]	States Served[6]
	Morgan Falls	2237	2/28/2009	17.000	66,637.597	Fulton	
	Riverview	2350	12/31/1993	1.000	3,126.000	Harris	
	Sinclair	1951	8/31/1997	45.000	137,522.200	Baldwin	
	Tugaloo & Tallulah	2354	12/31/1993	167.000	511,068.270	Rabun Habersham	
	Wallace	2413	5/31/2020	321.000	411,069.000	Putnam	
South Carolina Electric & Gas Company	Stevens Creek	2535	12/31/1993	19.000	96,253.000	Columbia	SC
				771.000	2,366,466.379		
Idaho (16)							
Idaho Power Company	American Falls	2736	2/28/2025	92.340	686,560.000	Power	ID/NV/OR
	Bliss	1975	2/28/1998	75.000	577,767.000	Gooding	
	C.J. Strike	2055	11/30/2000	82.800	698,761.000	Owyhee	
	Cascade	2848	1/31/2031	6.210	576.000	Valley	
	Hells Canyon	1971[17]	7/31/2005	1,166.900	8,799,468.000	Washington	
	Lower Salmon	2061	12/23/1997	60.000	430,915.000	Twin Falls	
	Malad	2726	7/31/2004	20.700	189,766.000	Gooding	
	Shoshone Falls	2778	5/31/1999	12.500	97,325.000	Jerome	
	Swan Falls	503	6/30/2010	10.265	78,095.000	Ada	
	Twin Falls	18	6/10/1984	8.437	75,120.000	Twin Falls	
	Upper Salmon	2777	5/31/1999	34.500	277,324.000	Gooding	
Utah Power & Light Company	Ashton & St. Anthony	2381	12/31/1987	6.300	43,010.000	Fremont	ID/UT/WY
	Grace & Cove	2401	10/01/2001	40.500	242,176.675	Caribou	
	Oneida	472	6/30/2000	30.000	176,149.000	Franklin	
	Soda	20	7/04/2003	14.000	82,268.000	Caribou	
The Washington Water Power Company	Cabinet Gorge	2058	1/09/2001	200.000	1,162,261.000	Bonner	ID/MT/WA
				1,860.452	13,617,541.675		

State[1] Company	Project Name[2]	License No.[2]	License Expiration Date[3]	Installed Capacity (Nameplate Megawatts)[4]	Generation (Megawatt-hours)[4]	County[5]	States Served[6]
Illinois (2)							
Commonwealth Edison Company	Dixon	2446	12/31/1993	3.000	11,929.000	Lee	IL
South Beloit Water, Gas and Electric Company	Rockton	2373	12/31/1993	1.100	6,349.000	Winnebago	IL
				4.100	18,278.000		
Indiana (3)							
Indiana & Michigan Electric Company	Elkhart	2651	5/31/2000	3.400	17,364.000	Elkhart	IN/MI
	Twin Branch	2579	12/31/1993	7.300	3,678.000	St. Joseph	
Public Service Company of Indiana, Inc.	Markland	2211	4/30/2011	81.000	331,857.000	Ohio	OH
				91.700	352,899.000		
Kentucky (2)							
Kentucky Utilities Company	Lock No. 7	539	8/18/1976[18]	2.000	5,809.000	Mercer	KY/TN
Louisville Gas and Electric Company	Ohio Falls	289	11/10/2005	80.320	351,614.000	Jefferson	KY
				82.320	357,423.000		
Maine (32)							
Bangor Hydro-Electric Company	Ellsworth & Graham	2727	12/31/1987	8.900	36,741.200	Hancock	ME
	Howland	2721	9/30/2000	1.875	10,239.400	Penobscot	
	Medway	2666	3/31/1999	3.440	26,213.200	Penobscot	
	Milford	2534	12/31/1990	6.400	49,890.500	Penobscot	
	Orono	2710	12/31/1993	2.332	15,777.600	Penobscot	
	Stanford	2600	12/31/1987	3.800	19,346.000	Penobscot	
	Stillwater	2712	12/31/1993	1.950	11,786.200	Penobscot	
	Veazie	2403	12/31/1987	8.400	61,082.700	Penobscot	
Central Maine Power Company	Automatic	2555	12/31/1993	0.800	3,814.576	Kennebec	ME
	Bar Mills	2194	6/30/2005	4.000	21,962.300	York	
	Bonny Eagle	2529	12/31/1993	7.200	51,614.317	York	
	Cataract	2528	12/31/1987	7.690	43,446.125	York	

State[1] Company	Project Name[2]	License No.[2]	License Expiration Date[3]	Installed Capacity (Nameplate Megawatts)[4]	Generation (Megawatt-hours)[4]	County[5]	States Served[6]
	Deer Rips-Androscoggin-Gulf Island	2283	12/31/1993	29.340	201,365.687	Androscoggin	
	Flagstaff Res.	2612[19]	12/31/1997	-	-	Somerset	
	Fort Halifax	2552	12/31/1993	1.500	7,730.400	Kennebec	
	Harris	2142	12/31/2001	75.000	222,307.650	Somerset	
	Hiram	2530	11/30/2022	2.400	20,134.990	Cumberland	
	North Gorham	2519	12/31/1993	2.250	10,902.631	Cumberland	
	Oakland	2559	12/31/1993	2.800	12,167.000	Kennebec	
	Rice Rips	2557	12/31/1993	1.600	7,227.200	Kennebec	
	Shawmut	2322	1/31/2021	8.650	55,186.920	Kennebec	
	Skelton	2527	12/31/1993	16.800	100,550.300	York	
	Topsham (Brunswick)	2284	2/28/2029	19.600	101,856.320	Androscoggin	
	Union Gas	2556	12/31/1993	1.500	7,013.200	Kennebec	
	West Buxton	2531	12/31/1987	7.925	35,186.510	York	
	Weston	2325	12/31/1993	12.000	75,445.245	Somerset	
	Williams	2335	12/31/1987	13.000	89,231.687	Somerset	
	Wyman	2329	12/31/1993	72.000	326,829.400	Somerset	
Maine Public Service Company	Caribou	2367	12/31/1993	0.800	5,308.000	Aroostook	ME
	Millinocket Lake	2366	6/30/1992	-	-	Piscataquis	
	Squa Pan	2368	12/31/1990	1.500	1,493.000	Aroostook	
Rumford Falls Power Company	Rumford Falls	2333	12/31/1993	36.800[7]	285,335.000[7]	Oxford	Indus-trial
				362.252	1,917,185.258		
Maryland (2)							
Pennsylvania Electric Company	Deep Creek	2370	12/31/1993	19.200	26,628.000	Garrett	NY/PA
Susquehanna Electric Company, The	Conowingo	405	9/01/2014	474.480	1,738,785.000	Harford	Whole-sale
				493.680	1,765,413.000		
Massachusetts (6)							
Holyoke Water Power Company	Connecticut Canal	2004	8/31/1999	42.100	153,559.278	Hampden	MA

State[1] Company	Project Name[2]	License No.[2]	License Expiration Date[3]	Installed Capacity (Nameplate Megawatts)[4]	Generation (Megawatt-hours)[4]	County[5]	States Served[6]
New England Power Company	Deerfield River	2323[20]	12/31/1993	11.000	33,234.000	Franklin	MA/VT
	Fife Brook	2669	3/31/2020	78.000	308,689.000	Franklin	
Western Massachusetts Electric Company	Gardner Falls	2334	12/31/1993	3.600	16,084.500	Franklin	MA
	Northfield Mt.	2485[21]	4/30/2018	160.700	148,488.990	Franklin	
	Turners Falls	1889	4/30/2018	56.700	269,299.700	Franklin	
				352.100	929,355.468		
Michigan (33)							
Alpena Power Company	Hillman	2419	12/31/1993	0.250	669.954	Alpena	MI
	Thunder Bay River	2404	12/31/1993	7.000	34,211.600	Alpena	
Consumers Power Company	Alcona	2447	12/31/1993	8.000	27,689.750	Alcona	MI
	Calkins Bridge	785	4/10/2010	2.600	13,290.000	Allegan	
	Cooke	2450	12/31/1993	9.000	28,117.100	Alcona	
	Croton	2468	12/31/1993	9.000	43,932.000	Nawaygo	
	Five Channels	2453	12/31/1993	6.000	26,171.700	Alcona	
	Foote	2436	12/31/1993	9.000	32,382.800	Alcona	
	Hardy	2452	12/31/1993	30.000	103,643.500	Nawaygo	
	Hodenpyl	2599	12/31/1993	18.000	41,563.500	Manistee	
	Loud	2449	12/31/1993	4.000	20,505.647	Alcona	
	Ludington P.S.	2680[22]	6/30/2019	1,978.800	2,788,155.000	Mason	
	Mio	2448	12/31/1993	5.000	16,155.700	Oscoda	
	Rogers	2451	12/31/1993	6.800	33,273.000	Mecosta	
	Tippy	2580	12/31/1993	20.000	57,840.000	Manistee	
	Webber	2566	4/01/2001	3.300	15,118.800	Ionia	
Indiana & Michigan Electric Company	Buchanan	2551	12/31/1993	4.100	13,181.000	Berrien	IN/MI
Lake Superior District Power Company	Saxon Falls	2610	12/31/1989	1.250	13,127.000	Gogebic	MI/WI
	Superior Falls	2587	12/31/1993	1.320	14,814.552	Gogebic	
Michigan Power Company	Mottville	401	9/18/2003	1.680	8,259.000	St. Joseph	MI
Upper Peninsula Power Company	Prickett	2402	12/31/1993	2.200	8,746.000	Baraga	MI
	Victoria	1864	12/31/1988	12.000	86,996.000	Gogebic	

State[1] Company	Project Name[2]	License No.[2]	License Expiration Date[3]	Installed Capacity (Nameplate Megawatts)[4]	Generation (Megawatt-hours)[4]	County[5]	States Served[6]
Wisconsin Electric Power Company	Big Quinnesec Falls	1980	2/28/1998	19.500	128,813.000	Dickinson	MI/WI
	Brule	2431	12/31/1993	5.335	20,084.000	Iron	
	Chalk Hill	2394	6/30/1993	7.800	46,274.000	Menominee	
	Hemlock Falls	2074	10/31/2001	2.800	15,378.000	Iron	
	Kingsford	2131	6/30/2004	7.200	36,052.000	Dickinson	
	Lower Paint	2072	12/31/2001	0.100	719.000	Iron	
	Michigamme	1759	12/31/2001	19.944	136,938.000	Iron Dickinson	
	Michigamme Falls	2073	10/31/2001	9.600	55,547.000	Iron	
	Sturgeon River	2471	12/31/1993	0.800	5,479.000	Dickinson	
	White Rapids	2357	12/31/1993	8.000	45,661.000	Menominee	
Wisconsin Public Service Corporation	Grand Rapids	2433	12/31/1993	7.020	42,302.000	Menominee	MI/WI
				2,227.399	3,961,090.603		
Minnesota (8)							
Minnesota Power	Blanchard	346	8/24/2003	12.000	92,966.000	Todd	MN
	Little Falls	2532	12/31/1993	4.700	34,268.000	Todd	
	Pillager	2663	5/11/1997	1.500	10,436.000	Morrison	
	Praire River	2361	12/31/1993	1.100	2,577.000	Ithasca	
	St. Louis	2360	12/31/1993	85.300	557,260.000	Carlton St. Louis	
	Sylvan	2454	12/31/1993	3.400	16,387.000	Morrison	
	Winton	469	10/31/2003	4.000	31,272.000	Lake	
Northern States Power Company	Hennepin Island	2056	12/31/2000	20.400	181,421.000	Hennepin	MN/ND/SD
				132.400	926,587.000		
Missouri (3)							
The Empire District Electric Company	Ozark Beach	2221	8/31/1993	16.000	72,830.400	Taney	AR/KS/MO/OK
Union Electric Company	Osage	459	2/28/2006	172.000	691,668.500	Miller	IA/IL/MO
	Taum Sauk	2277	6/30/2010	408.000	23,089.600	Iron	
				596.000	787,588.500		
Montana (9)							
Montana Light & Power Company	Lake Creek	2594	11/30/2011	4.500[7]	28,855.000[7]	Lincoln	MT

State[1] Company	Project Name[2]	License No.[2]	License Expiration Date[3]	Installed Capacity (Nameplate Megawatts)[4]	Generation (Megawatt-hours)[4]	County[5]	States Served[6]
The Montana Power Company	Flint Creek	1473	6/30/1988	1.100	6,348.000	Granite	MT/WY
	Kerr	5	5/22/1980[23]	197.000	1,100,750.810	Lake	
	Milltown	2543	12/31/1993	3.000	16,663.179	Missoula	
	Missouri-Madison	2188	11/30/1998	260.000	2,253,420.380	Cascade Gallatin Lewis & Clark Madison	
	Mystic Lake	2301	12/31/2009	12.000	43,475.240	Stillwater	
	Thompson Falls	1869	12/31/2015	30.000	319,899.000	Sanders	
Pacific Power & Light Company	Big Fork	2652	4/30/1990	4.150	31,654.000	Flathead	CA/ID/MT OR/WA/WY
The Washington Water Power Company	Noxon Rapids	2075	4/30/2005	282.880	1,783,371.000	Sanders	ID/MT/WA
				794.630	5,584,436.609		
New Hampshire (8)							
New England Power Company	Fifteen Miles Falls	2077[24]	7/31/2001	291.000	698,457.000	Grafton	MA/VT
	Vernon	1904[25]	4/30/2018	24.000	122,284.200	Cheshire	
	Wilder	1892	4/30/2018	34.000	170,386.200	Grafton	
Public Service Company of New Hampshire	Amoskeag	1893	12/31/2005	16.000	85,079.300	Merrimack Hillsborough	NH/VT
	Ayers Island	2456	12/31/1993	8.000	46,018.000	Grafton Belknap	
	Eastman Falls	2457	12/31/1987	6.000	13,204.000	Merrimack	
	Gorham	2288	12/31/1993	2.000	14,259.000	Coos	
	J. Brodie Smith	2287	12/31/1993	15.000	107,006.070	Coos	
				396.000	1,256,693.770		
New Jersey (1)							
Jersey Central Power & Light Company	Yards Creek	2309	2/28/2013	386.900	238,594.000	Warren	NJ
				386.900	238,594.000		

State[1] Company	Project Name[2]	License No.[2]	License Expiration Date[3]	Installed Capacity (Nameplate Megawatts)[4]	Generation (Megawatt-hours)[4]	County[5]	States Served[6]
New York (26)							
Niagara Mohawk Power Corporation	Beaver	2645	12/31/1993	46.000	204,934.000	Herkimer Lewis	NY
	Beebee Island	2538[26]	12/31/1993	7.000	32,802.000	Jefferson	
	Black River	2569	12/31/1993	29.000	164,359.000	Jefferson	
	E.J. West	2318	12/31/1993	20.000	57,922.800	Saratoga	
	Granby	2837	3/31/2020	5.000	20,340.000	Oswego	
	Green Island	13	3/02/2011	6.000	28,821.600	Albany	
	Hoosic	2616	12/31/1993	18.000	67,915.100	Rensselaer	
	Hudson	2482	12/31/1993	84.000	423,017.000	Washington Saratoga	
	Hydraulic Race	2424	6/30/1991	5.000	12,912.000	Monroe	
	Mechanicville	2500	12/31/1993	5.000	12,654.300	Saratoga	
	Oak Orchard	3452	7/01/2021	0.350[7]	1,273.500	Orleans	
	Oswego River	2474	12/31/1993	18.000	63,056.000	Oswego	
	Raquette	2084	1/31/2002	102.000	432,782.000	St. Lawrence	
	Raquette	2320	12/31/1993	46.000	308,325.000	St. Lawrence	
	Raymondville-Norfolk-Norwood	2330	12/31/1993	12.000	83,698.000	St. Lawrence Franklin	
	School-St.Cohoes	2539	12/31/1993	39.000	151,813.600	Schenectady	
	Stewarts Bridge	2047	8/31/2000	30.000	117,316.300	Saratoga	
	Stuyvesant Falls	2696	8/30/2005	3.000	5,643.400	Columbia	
New York State Electric & Gas Corporation	Keuka	2852	2/28/2003	2.000	2,737.000	Steuben	NY
	Rainbow Falls & Taylor Pond	2835	10/31/2002	3.000	13,657.800	Clinton Essex	
	Saranac	2738	4/12/2006	24.100	164,483.100	Clinton	
	Upper Mechanicville	2934	3/31/2021	16.530	18,202.000	Saratoga	
	Waterloo & Seneca Falls	2438	12/31/1993	10.000	13,964.000	Seneca	

State[1] Company	Project Name[2]	License No.[2]	License Expiration Date[3]	Installed Capacity (Nameplate Megawatts)[4]	Generation (Megawatt-hours)[4]	County[5]	States Served[6]
Rochester Gas and Electric Corporation	Station No. 2	2582	12/31/1993	6.500	41,476.000	Monroe	NY
	Station No. 26	2584	12/31/1993	3.000	10,739.000	Monroe	
	Station No. 5	2583	12/31/1993	38.250	141,656.000	Monroe	
				578.730	2,596,500.500		
North Carolina (14)							
Carolina Power & Light Company	Blewett Falls					Madison	
	Lake & Tillery	2206	4/30/2008	109.000	380,988.000	Anson	NC/SC
	Walters	432	11/22/1976[27]	108.000	434,507.000	Haywood	
Duke Power Company	Catawba	2232[28]	8/31/2008	804.940	2,007,424.000	Burke Catawba Gaston Iredell Lincoln	NC/SC
	Idols	2585	7/31/2000	1.411	3,856.000	Forsyth	
	Spencer Mountain	2607	12/31/1993	0.640	2,140.000	Gaston	
Nantahala Power & Light Company	Bryson	2601	7/31/2005	1.000	5,369.000	Swain	NC
	Dillsboro	2602	7/31/2005	0.225	1,154.000	Jackson	
	East Fork	2698	2/01/2006	26.000	112,049.000	Jackson	
	Franklin	2603	7/31/2005	1.000	3,995.000	Macon	
	Mission	2619	8/31/2005	2.000	9,495.000	Cherokee	
	Nantahala	2692	2/28/2006	43.000	261,957.000	Macon	
	Queens Creek	2694	9/30/2001	1.000	4,934.000	Macon	
	Tuckasegee & Thorpe	2686	1/30/2006	25.000	119,581.000	Jackson	
Virginia Electric and Power Company	Gaston & Roanoke Rapids	2009	1/31/2001	278.000	785,643.000	Halifax Northampton	NC/VA/WV
				1,401.216	4,133,092.000		
Ohio (1)							
Ohio Power Company	Racine	2570	11/30/2023	48.000	126,386.000	Meigs	OH
				48.000	126,386.000		

State[1] Company	Project Name[2]	License No.[2]	License Expiration Date[3]	Installed Capacity (Nameplate Megawatts)[4]	Generation (Megawatt-hours)[4]	County[5]	States Served[6]
Oregon (13)							
Pacific Power & Light Company	Bend	2643	12/31/1993	1.110	7,642.000	Deschutes	CA/ID/MT/OR/WA/WY
	Klamath	2082[29]	2/28/2006	-	-	Klamath	
	North Umpqua	1927	1/29/1997	186.000	1,087,178.000	Douglas	
	Powerdale	2659	2/28/2000	6.000	22,415.000	Hood River	
	Prospect No. 3	2337	12/31/1988	7.200	51,801.000	Jackson	
	Prospect No.1,2,4	2630	7/01/2005	36.760	309,732.000	Jackson	
	Wallowa Falls	308	2/28/1986	1.100	6,177.000	Wallowa	
Portland General Electric Company	Bull Run	477	11/16/2004	21.000	103,152.000	Clackamas	OR
	North Fork	2195	8/31/2006	92.000	556,936.000	Clackamas	
	Oak Grove	135	8/31/2006	51.000	256,099.000	Clackamas	
	Round Butte & Pelton	2030	12/31/2001	344.300	1,827,694.000	Jefferson	
	Sullivan	2233[30]	12/31/2004	15.400	96,467.000	Clackamas	
Idaho Power Company	Hells Canyon	1971[31]	7/31/2005	-	-	Baker	ID/NV/OR
				761.870	4,325,293.000	Wallowa	
Pennsylvania (8)							
Cleveland Electric Illuminating Company, The	Sennecca	2280[32]	11/30/2015	422.400	512,327.000	Warren	OR
Pennsylvania Electric Company	Piney	309	10/12/2002	28.800	66,083.000	Clarion	NY/PA
	Warrior Ridge	2372	12/31/1993	-	-	Huntingdon	
Pennsylvania Power & Light Company	Holtwood	1881	9/01/2014[33]	108.000	597,056.000	Lancaster	PA
	Wallenpaupack	487	9/30/2004	40.000	103,009.000	Pike	
Philadelphia Electric Company	Muddy Run P.S.	2355	8/31/2014	800.000	979,405.000	Lancaster	PA
Safe Harbor Water Power Corp.[34]	Safe Harbor	1025	4/22/2030	230.000	956,077.000	Lancaster	Wholesale
York Haven Power Company	York Haven	1888	9/01/2014	19.600	123,811.000	York	Wholesale
				1,648.800	3,337,768.000		

State[1] Company	Project Name[2]	License No.[2]	License Expiration Date[3]	Installed Capacity (Nameplate Megawatts)[4]	Generation (Megawatt-hours)[4]	County[5]	States Served[6]
South Carolina (12)							
Duke Power Company	Buzzard Roost	1267	2/10/1985	15.000	52,543.000	Greenville	NC/SC
	Catawba	2232[35]	8/31/2008	-	-	Fairfield Kershaw Lancaster York	
	Gaston Shoals	2332	12/31/1993	9.140	32,329.000	Cherokee	
	Hollidays Bridge	2465	12/31/1993	3.500	14,378.000	Anderson	
	Keowee & Jocassee	2503	8/31/2016	750.000	1,087,214.000	Pickens	
	Ninety Nine Islands	2331	12/31/1993	18.000	61,592.000	Cherokee	
	Saluda	2406	12/31/1993	2.400	7,921.000	Greenville	
South Carolina Electric & Gas Company	Columbia Hydro	1895	6/30/2000	11.000	36,816.000	Richland	SC
	Neal Shoals	2315	12/31/1993	5.200	28,390.000	Chester	
	Parr Shoals	1894	6/30/2020	526.000	441,182.000	Fairfield Newberry	
	Saluda	516	8/04/1977[36]	198.000	290,667.000	Newberry	
Lockhart Power Company	Lockhart	2620	3/31/2000	12.300	82,628.600	Chester	SC
				1,550.540	2,135,660.600		
Utah (7)							
Utah Power & Light Company	American Fork	696	10/31/2000	1.000	3,709.000	Utah	ID/UT/WY
	Beaver	814	8/31/1979[37]	2.400	8,630.000	Beaver	
	Cutler	2420	12/31/1993	30.000	232,952.000	Box Elder	
	Olmsted	596	10/20/1975[38]	12.700	57,708.000	Utah	
	Pioneer	2722	8/31/2000	5.000	11,772.000	Weber	
	Stairs	597	6/30/2000	1.000	6,515.000	Salt Lake	
	Weber	1744	6/30/1970[39]	2.500	14,128.000	Weber	
				54.600	335,414.000		
Vermont (19)							
Central Vermont Public Service Corporation	Arnold Falls	2399	12/31/1993	0.400	1,786.000	Caledonia	VT/NY
	Cavendish	2489	12/31/1993	1.400	6,199.000	Windsor	
	Gage	2397	12/31/1993	0.700	3,179.000	Caledonia	

State[1] Company	Project Name[2]	License No.[2]	License Expiration Date[3]	Installed Capacity (Nameplate Megawatts)[4]	Generation (Megawatt-hours)[4]	County[5]	States Served[6]
	Fairfax	2205	12/31/1987	16.900	111,787.000	Franklin Chittenden	
	Middlebury & Lower	2737	7/01/2000	2.300	7,697.000	Addison	
	Passumpsic	2400	12/31/1993	0.700	3,972.000	Caldeonia	
	Pierce Mills	2396	12/31/1993	0.300	1,437.000	Caledonia	
	Taftsville	2490	12/31/1993	0.500	1,583.000	Windsor	
	Weybridge	2731	05/31/1980	3.000	14,531.000	Addison	
Citizens Utilities Company	Clyde	2306	12/31/1993	6.400	27,666.400	Orleans	AR/ID/VT
Green Mountain Power Corporation	Essex No. 19	2513	12/31/1993	7.200	33,462.900	Chittenden	VT
	Vergennes No. 9	2674	5/31/1999	2.400	10,772.700	Addison	
	Waterbury No. 22	2090	8/31/2001	5.520	17,542.300	Washington	
New England Power Company	Bellows Falls	1855	6/30/2018	41.000	344,813.000	Windham	MA/VT
	Deerfield River	2323[40]	12/31/1993	-	-	Windham	
	Vernon	1904[41]	6/30/2018	-	-	Windham	
	Wilder	1892[42]	6/30/2018	-	-	Windsor	
Vermont Marble Company	Center Rutland	2445	12/31/1993	0.275[7]	1,632.000[7]	Rutland	Industrial
	Otter Creek	2558	3/31/2012	6.930[7]	42,660.000[7]	Rutland	
				95.925	630,720.300	Addison	
Virginia (9)							
Appalachian Power Company	Byllesby & Buck	2514	12/31/1993	30.100	126,966.000	Carroll	VA/WV
	Claytor	739	6/30/2011	75.000	284,285.000	Pulaski	
	Leesville & Smith Mt. Lakes	2210	3/31/2010	587.594	593,512.000	Bedford Pittsylvania Campbell	
	Niagara	2466	12/31/1993	2.400	8,467.000	Roanoke	
	Reusens	2376	12/31/1993	12.500	40,866.000	Lynchburg	
The Potomac Edison Company	Luray & Newport	2425	12/31/1993	3.000	15,779.000	Page	MD/VA/WV
	Shenandoah	2509	12/31/1993	0.862	1,724.000	Page	
	Warren	2391	12/31/1993	0.750	2,770.000	Warren	
Virginia Electric and Power Company	Cushaw Res.	906	6/16/2008	7.500	20,814.300	Amherst	NC/VA/WV
				719.706	1,095,183.300		

State[1] Company	Project Name[2]	License No.[2]	License Expiration Date[3]	Installed Capacity (Nameplate Megawatts)[4]	Generation (Megawatt-hours)[4]	County[5]	States Served[6]
Washington (8)							
Pacific Power & Light Company	Condit	2342	12/31/1993	9.600	54,523.000	Klickitat	CA/ID/MT OR/WA/WY
	Merwin	935[43]	12/11/2009	136.000	647,359.000	Clark	
	Swift No. 1	2111	4/30/2006	204.000	833,587.000	Skamania	
	Yale	2071	4/30/2001	108.000	665,886.000	Clark	
Puget Sound Power & Light Company	Baker	2150	4/30/2006	158.400	675,662.000	Skagit	WA
	Snoqualmie Falls	2493	12/31/1993	41.990	269,008.700	King	
The Washington Water Power Company	Meyers Falls	2544	12/31/1993	1.200	4,777.000	Steven	ID/MT/WA
	Spokane River	2545	8/01/2007	114.000	853,378.000	Spokane	
				773.190	4,004,180.700	Lincoln	
West Virginia (7)							
Kanawha Valley Power Company[44]	London-Marmet	1175	1/31/2014	28.800[7]	162,488.000[7]	Kanawha	Whole-sale
	Winfield	1290	1/31/2014	14.760[7]	104,905.000[7]	Putnam	
The Potomac Edison Company	Dam No. 5	2517	12/31/2003	1.120	6,851.000	Berkeley	MD/VA/WV
	Dam No. 4	2516	12/31/2003	1.000	4,338.000	Berkeley	
	Harpers Ferry	2515	12/31/1993	0.600	1,588.000	Jefferson	
	Millville	2343	12/31/1987	2.840	14,139.000	Jefferson	
West Penn Power Company	Lake Lynn	2459	12/31/1993	51.000	121,647.000	Preston	PA
				100.120	415,956.000		
Wisconsin (42)							
Consolidated Water Power Company	Biron No. 2	2192	6/30/2000	3.300	26,111.000	Wood	WI
	Du Bay	1953	6/30/1991	7.200	54,850.000	Portage	

State[1] Company	Project Name[2]	License No.[2]	License Expiration Date[3]	Installed Capacity (Nameplate Megawatts)[4]	Generation (Megawatt-hours)[4]	County[5]	States Served[6]
	Stevens Point	2110	6/30/2000	3.840	32,256.000	Portage	
	Wisconsin Rapids	2256	7/31/1993	4.680	33,091.000	Wood	
	Wisconsin River Division	2590	6/30/1993	1.800	8,303.000	Portage	
Lake Superior District Power Company	Big Falls	2390	12/31/1993	7.780	50,485.592	Rusk	MI/WI
	Hayward	2417	12/31/1993	0.170	1,636.048	Sawyer	
	Orienta	2564	12/31/1993	0.800	3,113.090	Bayfield	
	Thornapple	2475	12/31/1993	1.400	10,384.810	Rusk	
	White River	2444	12/31/1993	1.000	5,971.500	Ashland	
North Central Power Company, Inc.	Arpin	2684	4/30/2019	1.450[7]	8,574.000[7]	Shawano	WI
	Winter	2064	11/30/2001	0.600[7]	2,864.000[7]	Sawyer	
Northern States Power Company (Wisconsin)	Cedar Falls	2697	1/30/2001	6.000	40,549.400	Dunn	WI
	Chippewa Falls	2440	12/31/1993	21.600	93,186.400	Chippewa	
	Cornell	2639	11/30/2023	30.900	111,773.300	Chippewa	
	Eau Claire	2670	9/20/2000	9.500	58,688.000	Eau Claire	
	Holcombe	1982	6/30/1998	33.800	127,564.600	Chippewa	
	Jim Falls	2491	9/26/1983	14.400	89,975.600	Chippewa	
	Menomonie	2181	3/31/2005	5.400	27,839.400	Dunn	
	Trego	2711	3/31/1993	1.200	9,263.042	Washburn	
	Wissota	2567	6/30/2000	36.000	192,791.100	Chippewa	
Northwestern Wisconsin Electric Company	Black Brook	2894	12/31/2020	0.648	2,395.400	Polk	WI
Wisconsin Electric Power Company	Oconto Falls	2523	12/31/1993	1.320	8,615.000	Oconto	MI/WI
	Pine	2486	12/31/1993	3.600	24,359.000	Florence	
	Weyauwega	2550	12/31/1993	0.440	917.000	Waupaca	

State[1] Company	Project Name[2]	License No.[2]	License Expiration Date[3]	Installed Capacity (Nameplate Megawatts)[4]	Generation (Megawatt-hours)[4]	County[5]	State Served[6]
Wisconsin Power and Light Company	Beloit	2348	12/31/1993	0.380	3,473.000	Rock	WI
	Janesville-Central	2347	12/31/1993	0.250	3,156.213[45]	Rock	
	Janesville-Monteray	2346	12/31/1993	0.250	-[46]	Rock	
	Shawano	710	7/19/1977[47]	0.700	4,927.000	Shawano	
Wisconsin Public Service Corporation	Alexander	1979	6/30/1974[48]	4.200	25,177.000	Lincoln	MI/WI
	Caldron Falls	2525	12/31/1993	6.400	23,303.000	Marinette	
	Grandfather Falls	1966	12/31/1987[49]	17.240	125,655.900	Lincoln	
	High Falls	2595	12/31/1993	7.000	21,219.000	Marinette	
	Jersey	2476	12/31/1993	0.512	3,319.000	Lincoln	
	Johnson Falls	2522	12/31/1993	3.520	14,806.000	Marinette	
	Otter Rapids	1957	6/30/1990	0.500	3,029.000	Vilas	
	Peshtigo	2581	12/31/1993	0.584	4,218.000	Marinette	
	Potato Rapids	2560	12/31/1993	1.380	7,270.000	Marinette	
	Sandstone Rapids	2546	12/31/1993	3.840	16,310.000	Marinette	
	Tomahawk	1940	12/31/1986	2.600	14,144.000	Lincoln	
	Wausau	1999	6/30/1995	5.400	35,452.000	Marathon	
Wisconsin River Power Company[50]	Petenwell-Castle Rock	1984	1/31/1998	35.000	259,428.000	Adams	Wholesale
				288.584	1,590,444.395		

	TOTALS
Total Installed Capacity (Nameplate, Megawatts):	21,994.462
Total Generation (Megawatt-hours):	90,924,750.155
Total Number of States (Served):[51]	41
Total Number of Companies:[52]	76
Total Number of Projects:[53]	366
Total Number of Projects Subject to Relicensing through 1993:	177

FOOTNOTES

1/ State designations represent the state in which the project is located. Source: Hydropower Resources of the United States, January 1, 1980, Federal Energy Regulatory Commission, Table 10, pgs. 129-140, (FERC-0070). Numbers within the parentheses represent the total number of projects located within the state.

2/ Source: FERC.

3/ Source: FERC.

4/ Source: FERC, Form 1 (1983), except as noted.

5/ Source: U.S. Department of Energy, Energy Information Administration.

6/ Source: Catalogue of Investor-Owned Electric Utility Companies Operating in the United States, 24 edition (EEI) and EEI.

7/ Source: EIA, Form 759 (1983).

8/ Competing application filed by Consortium of 17 Cities and Districts.

9/ Relicense application filed 12/26/1972. Competing application filed 4/9/1974 by City of Santa Clara.

10/ Relicense application filed 12/21/1979. Competing application filed by Tuolumne Regional Water District.

11/ Relicense application filed 9/28/1979. Competing application filed by Consortium of 15 Cities and Districts.

12/ Part of project located in Oregon, Installed capacity and generation are for both California and Oregon.

13/ Relicense application filed as of May 3, 1983.

14/ Reservoir only.

15/ Competing application filed by City of Vernon.

16/ Competing application filed by June Lake Public District.

17/ Part of project located in Oregon. Installed capacity and generation are for both Idaho and Oregon.

18/ Relicense application filed as of May 3, 1983.

19/ Reservoir only.

20/ Part of project located in Vermont. Installed capacity and generation are for both Massachusetts and Vermont.

21/ Jointly-owned with The Connecticut Light and Power Company. Installed capacity and generation are for both companies.

22/ Jointly-owned with The Detroit Edison Company (49%). Installed capacity and generation are for both companies.

23/ Relicense application filed as of May 3, 1983. Competing application filed by Salish and Kootenai tribes.

24/ Part of project located in Vermont. Installed capacity and generation are for both New Hampshire and Vermont.

25/ Part of project located in Vermont. Installed capacity and generation are for both New Hampshire and Vermont.

26/ Jointly-owned with Beebee Island Corporation (17.2%). Installed capacity and generation are for Niagara Mohawk Power Corporation only.

27/ Relicense application filed as of May 3, 1983.

28/ Part of project located in South Carolina. Installed capacity and generation are for both North Carolina and South Carolina.

29/ Part of project located in California. See California for installed capacity and generation for both California and Oregon.

30/ Jointly-licensed with Crown Zellerbach and Publishers Paper Company. Installed capacity and generation are for Portland General Electric Company only.

31/ Part of project located in Idaho. See Idaho for installed capacity and generation for both Idaho and Oregon.

32/ Jointly-owned with Pennsylvania Electric Company (20%). Installed capacity and generation are for both companies.

33/ Source: Pennsylvania Power & Light Company.

34/ Jointly-owned by Baltimore Gas and Electric and Pennsylvania Power & Light Company.

35/ Part of project located in North Carolina. See North Carolina for installed capacity and generation for both North Carolina and South Carolina.

36/ Relicense application filed as of May 3, 1983.

37/ Application to delete filed on 5/13/1976.

38/ Relicense application filed as of May 3, 1983. Competing application filed by Consortium of 8 Cities and Districts.

39/ Relicense application filed as of May 3, 1983. Competing application filed 7/19/1974 by City of Bountiful.

40/ Part of project located in Massachusetts. See Massachusetts for installed capacity and generation for both Massachusetts and Vermont.

41/ Part of project located in New Hampshire. See New Hampshire for installed capacity and generation for both New Hampshire and Vermont.

42/ Part of project located in New Hampshire. See New Hampshire for installed capacity and generation for both New Hampshire and Vermont.

43/ Relicense application filed 4/26/1976. Competing application filed by Clark-Cowlitz Joint Operating Agency.

44/ Subsidiary of Appalachian Power Company.

45/ Includes generation for Wisconsin Power and Light Company License No. 2346.

46/ Generation included with Wisconsin Power and Light Company License No. 2347.

47/ Relicense application filed 11/8/1976. Competing application filed by Shawano Municipal Utilities.

48/ Relicense application filed as of May 3, 1983.

49/ Competing application filed by Wisconsin Public Power Incorporated System.

50/ Jointly-owned by Wisconsin Power and Light Company and Wisconsin Public Service Corporation.

51/ An additional 5 states are benefitted through sales to other utilities.

52/ Total includes investor-owned electric utilities which wholly-own and jointly-own projects.

53/ Projects located in more than 1 state (6) are included only once. Therefore, the sum of the states' project totals (within parentheses by each state name) will not equal Total Number of Projects.

THE NEW YORK TIMES

June 3, 1984

Power to the People, Privately

The Mokelumne River hydro complex near Lake Tahoe provides low-cost power to 3.5 million customers of the Pacific Gas and Electric Company. Now the city of Santa Clara is asking the Federal Government to transfer all the hydropower to its 40,000 municipal electric co-op customers.

Common sense suggests that the extremely cheap power from this Federal project, worth $45 million a year, should be shared as widely as possible. But a legal loophole gives Santa Clara an inside track to the bonanza. In fact, unless the law is changed, 180 Federal hydropower systems will be vulnerable to takeovers by small, publicly owned utilities in the next ten years.

Private utilities operate some 300 Federal hydropower dams under 50-year licenses. These regulated utilities must pass on the benefits of low-cost power to consumers. Many of the dams were built in the 30's and 40's and the licenses are starting to come up for renewal. Under an ambiguously worded provision of a 1920 law, publicly owned utilities seem to have preferential rights to the power. Not surprisingly, private licensees and representatives of their millions of customers are pressing Congress to amend the law.

The ideal reform — one desired by neither private utilities that have the hydropower now nor the municipal co-ops that hope to get it — would auction off expired licenses to the highest bidder. That way, all Americans would share the benefits of hydropower, which typically costs one-tenth as much as electricity generated from oil.

But a free-market solution holds little appeal to Congress. No organized interest would benefit very much. The next-best approach is more politically practical: Spread the cheap hydropower as widely as possible. Since current private licensees serve many times more people than the municipal co-ops angling to replace them, they should be given preference in license renewal.

With the support of the Reagan Administration, a bill to do just that has been introduced in the House by Richard Shelby of Alabama and 100 co-sponsors. More power to them.

San Francisco Examiner
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Editorials

Rule out the power-plant grab

A BATTLE of great pocketbook importance to California buyers of electricity is being fought in legislative and regulatory corridors of the nation's capital, and in the courts. At issue are rules governing the relicensing of hydroelectric plants that for decades have been providing relatively inexpensive power for customers of investor-owned utilities like Pacific Gas & Electric.

Smaller, municipally owned utilities are trying to take over many of the plants as the federal licenses come up for renewal after as long as 50 years. These public power companies, including those serving such Northern California cities as Santa Clara and Palo Alto, hope to benefit from a disputed interpretation of the Federal Power Act. Their bid to grab these power sources from the great majority of utility customers should be rebuffed.

The fate of the old but efficient hydroelectric facilities was thrown into turmoil by a 1980 ruling of the Federal Energy Regulatory Commission (FERC) that municipal utilities should be given preference in the relicensing of the plants, as well as in the initial licensing. The FERC has since reversed itself, but the earlier decision touched off a rash of litigation and license challenges by governmental electric companies trying to supplant the original developers and operators of the hydroelectric plants.

The potential unfairness of this is clear from the numbers involved in the PG&E facilities most immediately affected. The plants were built by PG&E in the 1920s and '30s, and paid for and maintained ever since by revenues from PG&E customers who now number 3.5 million. The government-run utilities seeking the licenses serve only 620,000 customers. Their takeover of the cheap hydroelectric power would cost PG&E customers $140 million a year to replace the power with more expensive forms of generation. The municipal companies, besides, could acquire the PG&E plants at bargain prices under the applicable law based on federal jurisdiction over the waterways that provide the sites. At present, the public power agencies can take part in the hydroelectric savings as wholesale customers of PG&E.

The state Public Utilities Commission has embraced the interest of the 85 percent of Californians who buy their electricity from privately owned utilities, to head off the takeover by municipal bodies. As hydroelectric licenses expire, the cost to ratepayers of PG&E and Southern California Edison from losing the hydroelectric plants accounting for 12 percent of the power could be a staggering $3 billion in 2005.

What is required is a clarification of the law to make certain that the preference granted public power agencies applies only to the initial licensings of the projects, before the substantial ratepayer-backed investments have been made. The vehicle for that clarification is before Congress, in the form of the proposed Electric Consumers Protection Act, co-sponsored by 29 members of the California House delegation. The measure deserves passage this session.

EUGENE, OREGON, FRIDAY, SEPTEMBER 23, 1983

Editorial

Power law ignores reality

Last week's Federal Energy Regulatory Commission decision denying publicly owned utilities the inside track in hydroelectric dam relicensing proceedings was a step in the right direction. However, needless economic dislocations may still be caused in hundreds of U.S. communities unless Congress validates that decision by changing the underlying statute.

The Supreme Court has already signaled that it will uphold challenges of the FERC ruling under provisions of the Federal Power Act of 1920 and allow publicly owned utilities to claim preference in the relicensing of some 500 dams built by private power companies in the 1920s and 1930s.

That startling result was presaged in July when the Supreme Court let stand a lower federal court's endorsement of a 1980 FERC reading of the law that forced a Utah private power company to relinquish — at its original cost — a dam that it had built 50 years before.

Publicly owned utilities will continue to be allowed to take dams from private power companies on similarly absurd terms if Congress fails to revise the governing federal statute. Communities served by the "publics" will gain cheaper rates. But communities served by private companies will face sizable rate increases to pay for far more costly replacement electrical generating plants.

The abrupt shifting of power costs from one community to another will not be based on net public benefits. It will be done only to comply with congressional decisions made in the early days of America's electric industry, when hydroelectric sites were plentiful and it was not even imagined that economic growth and inflation would vastly increase their worth.

The stance taken by the FERC in 1980 when hydro licenses issued 50 or more years earlier were beginning to expire was reversed last week by a new majority of Reagan appointees to the commission.

Instead of following the precedent set in the Utah case, the regulatory panel voted 5-0 against transferring Merwin Dam, a Pacific Power & Light Co. installation on the Cowlitz River, to two Washington public utility districts. A 3-2 vote then produced a blanket rejection of preference for publicly owned utilities in relicensing proceedings.

But those decisions will be appealed to the Supreme Court. And, if Congress meanwhile fails to bring basic federal law into conformity with today's realities, the court will be bound by its previous tacit interpretation of the existing statute.

The Merwin Dam case offers pragmatic proof that hydro dams should be relicensed on the basis of where the power they produce is most needed. If the FERC's decision in that case is overturned, home and business owners in Portland and a number of other Pacific Northwest communities will be directly damaged. Far fewer residents of Cowlitz and Clark counties will be benefited.

Projecting the implications nationwide, Congress should make sure that the relicensing system will produce maximum public benefits, all things considered. It would be absurd to allow the Eugene Water & Electric Board, for example, to buy up a dozen or so private dams on the cheap and resell any surplus power so obtained to the dams' original owners, or simply to the highest bidder.

Oregon's Legislature has already revised this state's power laws to require market-value payment for privately financed dams coveted by publicly owned utilities, although the Emerald Peoples' Utility District is arguing that the change was made too late to keep the PUD from acquiring three dams on the North Umpqua from PP&L at their original cost.

Federal law should be updated to require publicly owned utilities to prove actual and transcending need if they seek to acquire dams built by private power companies. And it, too, should require payment at market value for those properties.

It is reasonable for the law to give publicly owned utilities first call on undeveloped hydro sites along publicly owned rivers. As existing federal hydro licenses expire over the next 20 years, the publics should also have equal standing in competing for a host of sites now controlled by private power companies.

However, Congress should not let an outmoded federal law cause economic chaos by arbitrarily permitting publicly owned utilities to take over all of this nation's hydroelectricity.

THE KANSAS CITY STAR
KANSAS CITY, MO.
D. 244,700 S. 399,305

AUG 16 1983

An old law could end cheap power

As if light bills weren't going up rapidly enough, a novel interpretation of the 1920 Federal Power Act by an administrative law judge of the Federal Energy Regulatory Commission threatens to add millions of dollars more to bills of the 75 percent of Americans served by investor-owned electric utilities. Congress in 1920, suspicious of private power companies, gave preference to federal, state and municipal power agencies in licensing hydroelectric plants.

That preference had always been considered to apply to original issuance of licenses. But in 1980, when the 50-year license came up for renewal on Pacific Power & Light's Merwin Dam in Washington state, the FERC judge ordered the company to sell the facility to two public utility districts as preference licensees. The price of $9.5 million—Merwin's original cost minus depreciation—is virtually confiscatory in terms of the project's replacement cost value.

Around the country 157 licenses on investor-owned hydro plants come up for renewal in the next 10 years and 11 municipalities already have filed competing applications on 11 of them in four Western states and Wisconsin. The municipal plants involved serve only 836,000 customers; the private power companies 8.4 million, or 10 times more.

Aside from the high-handedness of taking away these hydroelectric plants from their owners of half a century, the rates of those firms' customers would have to go up sharply to pay for replacement coal- or oil-fired generation or the purchase of outside power. Water power, requiring no fuel and little maintenance, is a utility's cheapest source of kilowatts, bringing down the average cost and its rates to customers. The Edison Electric Institute estimates costs would go up $170 million immediately for owners of the 11 plants facing municipal takeovers.

However, the FERC ruling has been upheld by a federal appeals court and the U.S. Supreme Court, so the investor-owned utilities' only recourse now is to get Congress to clarify the Federal Power Act to apply the preference rule to original licenses only. In simple fairness and equity—and for the relief of most utility ratepayers—Congress should do so quickly.

San Jose Mercury

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Editorials

Friday, August 13, 1982

10B

Power to the (most) people: Let PG&E keep its plants

IN licensing power plants, as in most other matters, a pretty good rule of thumb for government policy-makers is to seek the greatest good for the greatest number. By that standard, it makes sense to let Pacific Gas & Electric Co. keep operating a half-dozen Northern California power plants instead of turning them over to municipal utilities.

The six plants, four on the Mokelumne River and two on the Feather River, were built by PG&E about half a century ago under 50-year licenses issued by the federal government.

Now the licenses have run out, and the Federal Energy Regulatory Commission has to decide whether to re-license the plants to PG&E or instead award licenses to municipal utilities. The city of Santa Clara, which operates its own utility system, wants the Mokelumne River plants; the Northern California Power Agency, a consortium of 11 city-run utilities including Palo Alto's, would like to buy the Feather River pair.

PG&E is particularly worried by a recent FERC ruling that gives preference to municipal utilities over investor-owned ones in re-licensing cases, other factors being equal. PG&E and other utilities are challenging that ruling in court, and it could be a decade or more before the issue is decided and new licenses are actually issued.

The six plants on the Feather and the Mokelumne currently provide 16 percent of PG&E's hydroelectric capacity, and if PG&E loses them it will have to replace the power with far more costly electricity from "thermal" (oil, gas, coal or nuclear) plants. This would cost the ratepayers plenty — $111 million in a normal year, according to PG&E Chairman Fred Mielke, and even more as fossil fuel costs rise.

What's worse, Mielke fears that a victory by Santa Clara and NCPA would encourage other municipal utilities to take over more federally licensed hydro plants now operated by PG&E and other investor-owned utilities.

The effect would be to increase the already considerable advantage the municipal utilities enjoy as a result of being able to buy cut-rate federal hydro power, and to widen the already considerable rate gap between private-utility customers and municipal-utility customers, whom one PG&E attorney called "the aristocracy of energy consumers." The description is acerbic, but apt: Santa Clara utility customers pay a flat rate of only 3.7 cents per kilowatt-hour, while PG&E's minimum rate is nearly twice as high.

Santa Clara officials argue that water power is a resource that belongs to all the people, and that Santa Clara ratepayers are entitled to their share of it. There's some sense in that. But we don't see how 40,000 Santa Clara utility customers have a better claim to hydro power from the Mokelumne than 3.5 million PG&E customers do, or why a homeowner in Palo Alto is more entitled to cheap electricity than a homeowner in San Jose is.

PG&E built the power plants at its own expense and has run them for some 50 years; other things being equal, FERC should let it continue to run them — and let PG&E's customers continue to enjoy the savings.

EASTON, PA
EXPRESS
D. & S. 47,838

AUG 16 1983

Hot issue: control of hydroelectric dams

Easton and Pennsylvania have won the right to develop two small hydroelectric plants on the Lehigh River and canal west of the city. The total capacity of the project, which probably would be developed by a private company, would be 2.4 megawatts. The power would be sold to the Metropolitan Edison Co., with the city and state splitting the profit, which planners say could eventually reach about $2.4 million a year.

The idea of using the Lehigh's waters to generate a little power isn't very controversial. The future of large-scale hydroelectricity production nationally, however, is a hot issue.

The Edison Electric Institute, the lobby of the privately owned power companies, is up in arms over a 1980 interpretation of the Federal Power Act that may force the transfer of many hydroelectric projects from the utilities to municipalities. The EEI contends that such transfers threaten to increase electric bills of customers of privately owned power companies in 30 states.

The institute says municipalities in California, Utah, Washington, Montana and Wisconsin are seeking to obtain 11 hydroelectric projects from the private companies. If these 11 projects are licensed to municipalities, the average cost of electric bills to customers of the private utilities will increase $170 million a year, the EEI argues. Other increases will follow because the utilities will have to buy replacement power and/or build generating plants to replace the cheaper hydroelectricity. Private utilities using dams avoid the cost of fuel.

The municipalities involved serve 836,000 electric customers, but the 11 projects serve more than 8.4 million, EEI says. Rates of municipal utilities often are cheaper than those of private utilities because the municipal units have rights to the use of federal dams, can issue tax-free bonds and need not pay dividends.

When Congress passed the power act in 1920 it gave governmental units preference over the privately owned electric industry in the granting of licenses. The preference applied only to new plants until 1980, when the Federal Energy Regulatory Commission ruled that the preference should also apply when licenses on plants come up for renewal. This opened the door for municipal utilities to try to take over many hydroelectric dams. The decision has been upheld in the courts. An EEI map shows only one such facility in Pennsylvania that is due for relicensing over the next 10 years. There are none in New Jersey.

Private utilities built the dams under federal licenses good for 50 years. These companies make a big point of saying the system has saved customers billions of dollar annually in fuel costs. But it also has enabled the companies to reap profits through the use of a renewable public resource. The time seems ripe for a full congressional review of the 1920 law and of the nation's electric power policy with the aim of reaching a fair decision on the hydroelectricity issue.

CONTRA COSTA TIMES
Walnut Creek
February 22, 1985 - 14A

editorial

Act to prevent raid of hydropower plants

EFFORTS TO prevent a takeover of Pacific Gas and Electric Co. hydroelectric facilities by municipal and other government-operated utilities deserve support. The public would lose greatly from the dismantling of PG&E's hydropower system.

In more ways than one, the generation of electricity by falling water (as opposed to burning fuel) is the backbone of PG&E's power network. Hydroelectricity accounts for 20 to 40 percent of the utility's output and — of keen interest to ratepayers — is PG&E's cheapest source of electricity.

Wet years enable greater hydro generation and save ratepayers' money. Dry years exert upward pressure on rates. Both scenarios illustrate the importance of PG&E's hydropower system. It has more capacity serving more people than any other privately-owned utility in the country.

This resource is threatened by a small group of city-run and other government utilities. They have been trying to parlay their preferential status under the Federal Power Act into the right to take over PG&E hydro plants during relicensing of the facilities.

In the next 10 years, a number of the federal licenses covering more than 60 PG&E powerhouses will be expiring. Government utilities have won some favorable court and regulatory rulings on the takeover issue. We believe that it would be unfair, unreasonable and destructive to permit such takeovers.

Government-run utilities already have preference to low-cost power from federal hydroelectric projects even though they were financed by the tax dollars of all Americans. They shouldn't be allowed to raid hydro plants built by PG&E and paid for by the utility's shareholders and ratepayers.

If the menacing utilities' schemes are successful, they would significantly jack up PG&E customers' bills by forcing a resort to more expensive energy sources. The utility has estimated that the takeover of just four targeted plants would result in a $140 million annual rate increase.

The agencies which stand to benefit from hydro plant transfers, including Santa Clara, Palo Alto and several other Northern California cities, serve only about 620,000 customers. As operated by PG&E, in contrast, the hydropower projects serve 3.5 million customers.

In addition to disrupting PG&E's hydropower network, takeovers could force the utility to construct expensive new generating units to meet peak demands for electricity. All told, they would do great harm to a vital asset to the economic well-being of northern and central California.

Congress should act to do away with the discriminatory and unjust relicensing preference interpretation. Legislation is needed to permanently clarify that government-owned utilities aren't entitled to preferred status in relicensing proceedings.

"Never have so few tried to take so much from so many," says California public utility commissioner William Bagley. Some 32 counties and 121 cities, including several in the East BAy, have taken stands in support of PG&E. We agree: Let's keep the hydro plants operating for the benefit of the customers they were built to serve.

THE OREGONIAN, SUNDAY, JUNE 2, 1985

Merwin pursuit costly venture

You have to hand it to the Clark and Cowlitz public utility districts. For only $1.4 million in ratepayers' money, they have managed to worry so many people with their effort to win the license for Merwin Dam that Congress is considering legislation to block such takeovers. Now the utilities will spend some more money trying to block that legislation.

The utilities are playing for high stakes. If they win the Merwin Dam license from Pacific Power & Light Co., builder and operator of the aged dam, they could have a bargain, assuming they are not required to reimburse PP&L more than a token amount.

The "ifs" are still there, however. The public utility districts face powerful foes in a political climate less favorable toward public power than in earlier years, when the clause giving public power interests preference for generating sites and power purchases from federal agencies was inserted in various federal power laws.

The Federal Energy Regulatory Commission ruled against the public utilities and in favor of PP&L. The Washington, D.C., Court of Appeals will decide soon whether the federal agency acted legally, but the case is certain to be appealed to the Supreme Court, which will involve additional costs to the utility districts.

Meanwhile, legislation is before Congress that could repeal the preference clause or make it inapplicable to dam relicensing proceedings such as the Merwin case. Clark and Cowlitz PUDs are hoping to preserve their ability to win Merwin, but it is a fight with an uncertain prospect of victory.

The big risk is that Congress may consider the merits of the issue, and the merits lie on the side of PP&L and its ratepayers. The private firm built the dam and has operated it properly. While weak public utilities may have needed preferential treatment vs. the private giants 50 years ago, they can hardly advance that claim with straight faces now, especially in the interconnected power pool of the Pacific Northwest.

The public utilities, Congress will be reminded, could condemn Merwin Dam whenever they wanted. The real issue is what the dam will cost — a figure based on PP&L's original cost or one based on today's cost of building a replacement generating plant. Even if the public utilities win the right to the license, it could be a shallow victory if they lose on the cost issue.

In short, the battle could be far from over and still could turn out not to have been worth the cost to the ratepayers.

Meanwhile, the cause of regional cooperation on energy issues will suffer some more. The region's utilities, public and private, should be working together to ensure that the region's energy supply meets regional demands at the most cost-efficient price. Clark and Cowlitz may perceive that their interests lie in grabbing one cheap source of power, but their longer-range benefits lie in an orderly planning process that the takeover effort jeopardizes.

SAN FRANCISCO CHRONICLE
May 19, 1984 - 32

EDITORIALS

The Powerhouse Takeover Ploy

THE FIGHT OVER hydroelectric power sources in California that has been building up for several years went up to Congress this week. The Pacific Gas & Electric Company went toe-to-toe in conflict with municipally-owned public utility systems like Santa Clara's and Palo Alto's. We are unshaken in our belief that the PG&E should prevail.

The issue is, who is entitled to the first benefits that flow from California's Sierra streams in the form of low-cost hydroelectric power — the customers of PG&E, which built the dams and powerhouses that produce it, or the publicly-owned municipal systems whose raiding parties are demanding that the government turn over the licenses to them?

Altogether 15 such municipal systems in California are battling to assert a technical "preference" under federal power law that would reward them and their minority of customers with the fruits of half a century's investment of private money and of hard and dangerous work in hydro projects. PG&E holds 29 such project licenses, covering 63 operating power plants and nearly 180 dams and reservoirs, its chairman, Frederick W. Mielke Jr., told Congress on Thursday — all built through private investment; none by government money.

A claim by Santa Clara to a preference in taking over the PG&E's 4 powerhouses and 19 dams of its Mokelumne River project, for instance, would reward Santa Clara's 88,000 consumers with still lower rates — this in spite of the fact that Santa Clara residents pay lower rates for electricity than PG&E customers as it is. There is no warrant for such municipal takeovers.

Camarillo Daily News
12-16-83

Opinions

Power plant ripoff

The federal government is conspiring with some municipalities in California to practically steal 21 hydroelectric power generating facilities from Southern California Edison.

Of course the cities are going about this in a supposedly legal manner, but it still amounts to one of the biggest ripoffs of the century.

More than that, if the cities get away with such thievery, it will further undermine the free enterprise system and usher in a new dimension of government interference during 1984, the year of the "Big Brother."

Utilizing the cheapest source of power yet available, flowing water, Edison, a private, investor-owned utility built and paid for the hydroelectric plants with money collected from its customers — which includes businesses and industries in the Camarillo area.

Most of the powerplants were built in the 1920s and 1930s and now their licenses to operate have begun to expire. Edison, of course, has applied for new licenses but some greedy municipalities are seeking ways to not only grab up the permits but the facilities as well.

Edison's hydroelectric facilities are licensed by the Federal Engergy Regulatory Commission. In 1980, the FERC interpreted Section 7 of the Federal Power Act, the law that governs the licensing of hydroelectric projects, as granting "preference" to states and municipalities in obtaining new liceneses for existing hydroelectric projects as long as the state or city can show it is willing to "conserve and utilize in the public interest the water resources of the region."

The government agencies don't have to prove they can do a better job than the investor-owned utilities — only that their plans are as good as the utilities'.

If a government entity is granted a license to operate a hydroelectric plant already owned by Edison, what happens then? Naturally the next step is to acquire the facility. The cities managed to work out a pretty good deal on that count too. Rather than paying fair market value for the property, they can pick it up for the original cost minus depreciation — which is practically nothing compared to actual present worth.

Last April an FERC law judge ruled that a small municipality could take over a hydroelectric project in Washington State. The judge required the agency to pay only $9.4 million for the project, the utility's original investment minus depreciation. Obviously the project is worth many times that. The utility sought at least $832 milllion which it said would be needed to construct a coal-fired plant to generate the same amount of electricity.

In Southern California Edison's service area, the June Lake Public Utility District has filed for the license to operate Edison's Rush Creek Hydroelectric plant in Mono County, about 60 miles north of Bishop. In addition, the City of Vernon in the Los Angeles area has filed for the expiring license of another Edison hydroelectric plant 22 miles north of Rush Creek. Four other Edison plants will soon be exposed to similar challenges and by 1993 all 21 of Edison's hydro projects could be pirated by government agencies unless the law is changed to protect private utility investments.

If government succeeds in carrying out such grand larceny, Edison will be forced to charge its customers a great deal more in order to raise capital for replacement facilities.

There are other reasons why the FERC ruling should be reversed, such as the inability of the cities, inexperienced in power generation, to efficiently operate the facilities. There will be an accompanying loss of much needed energy in California and elsewhere and also major tax losses.

Edison customers can help correct this alarming situation by writing to Kenneth F. Plumb, Federal Energy Regulatory Commission Secretary; 825 N. Capitol St., N.E., Washington, D.C., 20426.

Table 3

State, Regional and National Endorsements

1. Adirondack North Country Association
2. American Association of Blacks in Energy
3. American Association of Retired Persons (AARP)
4. American Farm Bureau Federation
5. American G I Forum
6. American Paper Institute
7. American Petroleum Institute
8. American Textile Manufacturers Institute, Inc.
9. Associated Industries of Florida
10. Association of California Water Agencies
11. Building and Construction Trades Council of California, AFL-CIO
12. Building and Construction Trades Department, AFL-CIO
13. Business Roundtable
14. California Cattlemen's Association
15. California Farm Bureau Federation
16. California League of Food Processors
17. Chemical Manufacturers Association
18. California State Grange
19. County Supervisors Association of California
20. Cuban National Planning Committee
21. Electricity Consumers Resource Council (ELCON)
22. International Brotherhood of Electrical Workers (IBEW)
23. International Brotherhood of Teamsters
24. International Union of Operating Engineers, AFL-CIO

25. Mexican-American Political Association

26. National Association of Counties

27. National Association of Manufacturers

28. National Association of Regulatory Utility Commissioners (NARUC)

29. National Cattlemen's Association

30. National Conference of State Legislatures

31. National Council of Farmer Cooperatives

32 National Council of La Raza

33. National Council of Senior Citizens

34. National Forest Products Association

35. National Small Business Association

36. National Water Resources Association

37. New England Council, Inc.

38. State of California - Public Utilities Commission

39. State of Colorado - Public Utilities Commission

40. State of Michigan - Public Service Commission

41. State of Washington - Utilities and Transportation Commission

42. State of Florida - Public Service Commission

43. State of New York - Public Service Commission

44. Teamsters, Joint Council #7, California

45. U. S. Chamber of Commerce

46. Utility Workers Union of America

47. Western Growers Association

TABLE 4

Fuel Cost Value of Utility Company Hydro Plants

1. 1983 Total Utility Company Licensed Hydro Generation: (76 companies) 90,924.8 million kWH

2. Annual Fuel Costs for Equivalent Generation*:

Energy Source	1983 kWH Generation (Millions)	% of Total Generation	Cost
Coal	48,368.6	53.2	981,912,891
Oil	17,115.7	18.8	1,103,543,223
Natural Gas	25,322.2	27.9	1,470,472,838
Other**	118.3	0.1	3,491,314
	90,924.8	100.0	$3,559,420,266

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* Calculations were made using the formulas in Appendix A.

** Other includes unusual elements like wood-waste and international (Canada) purchases.

TABLE 5

Capacity Value of Utility Company Hydro Plants Based on Estimated Costs of Major Thermal Capacity Additions

Sources/Capacity Cost Estimate per kw	Capacity Cost of Utility Company Hydro Plants (Total Utility Company Hydro Capacity (21,994,462/kw) x Estimated Cost of Capacity) ($000)	Assumptions
Electric Power Research Institute, Inc., Technical Assessment Guide (preliminary information from 1985 TAG update to be published August, 1985) $1150-$1700	$25,293,631 - $37,390,585	Capital costs for coal-fired plants in service January 1985 expressed in December 1984 dollars. Range reflects different assumptions regarding unit size and differences in coal type (bituminous or lignite) by region.
Utility Data Institute, Inc., Capital Costs Projected Power Plants (March, 1985) $1380	$30,352,358	Capital cost represents average of 75 coal-fired plants expected in service during period 1985-1995. Estimate expressed in dollars per net kw including AFUDC.
Department of Energy, Energy Information Administration, Annual Energy Outlook 1984 (January, 1985) $817-$1081 (coal steam) $1213-$2888 (nuclear)	$17,969,475 - $23,776,013 (coal steam) $26,679,282 - $63,520,006 (nuclear)	Range represents differences in technology and region. Capital costs are "overnight" costs, with AFUDC excluded, and reflect 1984 dollars. A 2% real escalation in construction costs from 1980-1984 has been assumed.

Sources/Capacity Cost Estimate per kw	Capacity Cost of Utility Company Hydro Plants (Total Utility Company Hydro Capacity (21,994,462/kw) x Estimated Cost of Capacity) ($000)	Assumptions
A. Kaufman, D. Dulchinos and L. Parker, Gold at the End of the Rainbow?: A Perspective on the Future of the Electric Utility Industry, Congressional Research Service (December 31, 1984) $603-$3000	$37,830,475 (average plant coming on line in 1982) $65,983,386 (nuclear)	Four assumptions used in analysis: $603 represents average cost of all generating plant on line in 1982; $1720 represents average cost of new plant coming on line in 1982; $1172 is midpoint; and $3000 chosen as outer limit based on estimated cost of nuclear plants under construction. All costs are in 1982 constant dollars.
G. Smolen, J. Delene, L. Fuller, and H. Bowers, Regional Projections of Nuclear and Fossil Electric Power Generation Costs, Oak Ridge National Laboratory (December, 1984) $1042-$1133 (coal) $1608 (nuclear) $896 (oil) $1183 (gas)	$22,918,229 - $24,919,725 (coal) $35,367,095 (nuclear) $19,707,037 (oil) $26,019,449 (gas)	Total direct and indirect costs expressed in January 1982 dollars for plant entering service in 1995.
California Energy Commission, Relative Cost of Electricity Production (July, 1984) $870-$924 (non coal-fired steam) $2231 (coal steam) $2187-$3912 (nuclear)	$19,135,182 - $20,322,883 (non coal-fired steam) $49,069,645 (coal steam) $48,101,888 - $86,042,335 (nuclear)	All capital costs are for plant in service in 1990 and are expressed in constant 1984 dollars. Capital costs include AFUDC and real capital escalation rates specific to each technology.

Sources/Capacity Cost Estimate per kw	Capacity Cost of Utility Company Hydro Plants (Total Utility Company Hydro Capacity (21,994,462/kw) x Estimated Cost of Capacity) ($000)	Assumptions
Congressional Budget Office, Promoting Efficiency in the Electric Utility Sector (November, 1982) $1078-$1285	$23,710,030 - $28,262,884	Range reflects costs of new coal-fired capacity in five different regions and under three assumptions of carrying costs on capital. Costs are expressed in constant 1980 dollars.
Department of Energy, Energy Information Administration, Projected Costs of Electricity from Nuclear and Coal-Fired Power Plants, Vols. 1 (August, 1982) and 2 (November, 1982) $950-$1600	$20,894,739 (low sulfur coal) $21,444,600 (high sulfur coal) $35,191,139 (nuclear)	Range represents total capital costs for low sulfur bituminous coal capacity ($950/kw) and high-sulfur bituminous coal ($975/kw) and nuclear ($1600/kw) capacity. Costs are expressed in 1980 constant dollars for 1200 mw reference power plants entering service in 1995.

Note: These capacity cost estimates must be taken on their own assumptions. No attempt has been made to adjust them to a uniform basis, e.g., 1985 dollars.

Table 6. Pending Relicensing Cases: Annual Fuel Costs for Equivalent Generation

State	Project	1983 Capacity[1] (Nameplate) (MW)	1983 Generation[1] (kWh) (in millions)	Annual Fuel Cost for Equivalent Generation	Competitor
California					
Pacific Gas and Electric	Mokelumne, No. 137	192.8	1,528.1	$104,367,092	City of Santa Clara
	Phoenix No. 1061	1.6	16.1	1,099,592	Tuolumne Regional Water District
	Rock Creek/Cresta, No. 1962	180.9	1,410.3	96,321,551	Consortium of 14 Cities & Districts
	Haas-Kings River, No. 1988	179.1	1,394.2	95,221,919	Consortium of 15 Cities & Districts
Southern California Edison Co.	Poole, No. 1388	10.0	46.1	508,807	City of Vernon
	Rush Creek, No. 1389	8.4	67.6	746,108	June Lake Public District
Utah					
Utah Power & Light Co.	Olmsted, No. 596	12.7	57.7	818,102	Consortium of 8 Cities & Districts
	Weber River, No. 1744	2.5	14.1	199,933	City of Bountiful
Washington					
Pacific Power & Light Co.	Merwin, No. 935	136.0	647.4	5,963,142	Clark-Cowlitz Joint Operating Agency
Wisconsin					
Wisconsin Power & Light	Shawano, No 710	0.7	4.9	76,097	Shawano Municipal Utilities
Wisconsin Public Service Co.	Grandfather Falls, No. 1966	17.2	125.7	2,560,781	Wisconsin Public Power Incorporated System
		741.9	5,312.2	$307,883,124	

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[1] Federal Energy Regulatory Commission, Form 1 (1983).

[2] Annual fuel costs for equivalent generation are expressed in 1983 dollars and are determined by using 1983 company prices for replacement fuel; the calculations do not take into account future fuel costs or normalized water conditions. Calculations were made using the formulas shown in Appendix A.

[3] 28 municipalities.

Table 7

Potential Rate Consequences For PGandE Customers In Pending Relicensing Cases

Project	Entity Seeking Takeover	Estimated Direct Cost Consequences (Assumes 1983 Fuel Costs, Normal Water Conditions)	Future Consequences
Mokelumne (FERC 137)	City of Santa Clara	$ 53,589,000 annually	Ongoing fuel costs; replace Generation as PGandE customer load grows.
Rock Creek Cresta (FERC 1962)	SMUD, NCPA, 5 southern California cities - 35% of output to leave northern California.	$ 57,921,000 annually including estimated current cost of replacing 35% of output going to southern California.	Ongoing fuel costs; replace generation as PGandE customer load grows.
Haas-Kings River (FERC 1988)	SMUD, NCPA, 5 southern California cities - 35% of output to leave northern California.	$ 36,003,000 annually including estimated current cost of replacing 35% of output going to southern California.	Ongoing fuel costs; replace generation as PGandE customer load grows.
Phoenix (FERC 1061)	Tuolumne Regional Water District	$ 217,000 annually*	Ongoing fuel costs; replace generation as PGandE customer load grows.
	TOTAL	$147,731,000 annually	

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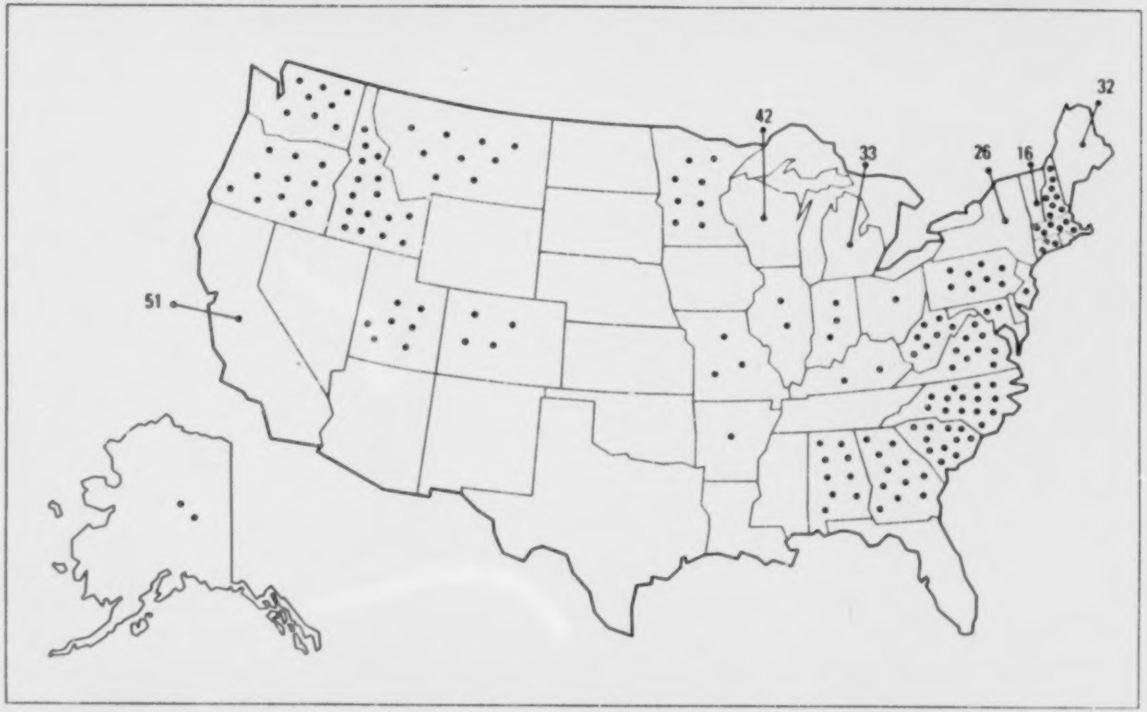
*Phoenix is subject to special rules. The consequences listed are under TRWD's theories.

FIGURE 1

UTILITY COMPANY HYDROELECTRIC PROJECTS LICENSED BY THE FEDERAL ENERGY REGULATORY COMMISSION

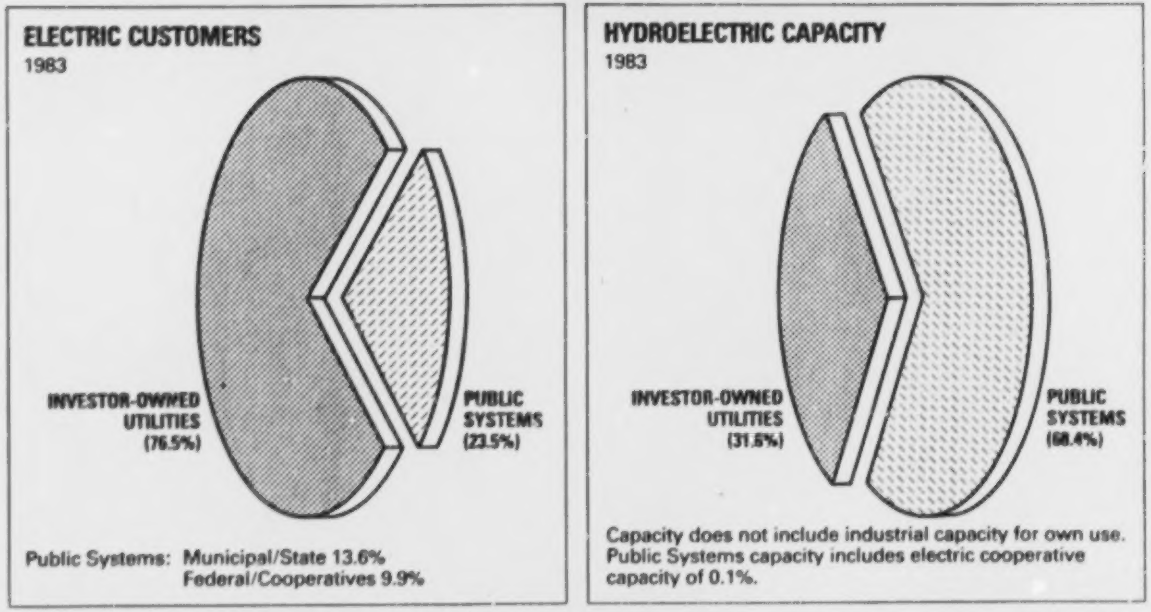


Low cost, renewable hydroelectric power is distributed to millions of customers in 41 states from 366 hydroelectric projects (depicted by dots) in 32 states licensed by FERC to utility company licensees.

FIGURE 2

Figure 2

RELATIONSHIP BETWEEN CUSTOMERS OF INVESTOR-OWNED UTILITIES AND PUBLIC UTILITIES AND ACCESS TO HYDROELECTRIC CAPACITY



Public Systems: Municipal/State 13.6%
Federal/Cooperatives 9.9%

Capacity does not include industrial capacity for own use. Public Systems capacity includes electric cooperative capacity of 0.1%.

State and municipal utilities serve only 13.6% of the electric customers in the country and yet with the original licensing preference and the Federal power marketing preferences, they have priority access to 68.3% of the hydroelectric capacity in the country.

SOURCES: Edison Electric Institute (Customers)/U.S. Energy Information Administration (Capacity)

APPENDIX A

Calculating Fuel Costs of Equivalent Generation

Coal

Step 1: Avg. Btu per lb of coal x 2000 lb per ton = Btu per ton ÷ avg. Btu per kWh = kWh per ton

Step 2: The project's 1983 hydro generation ÷ kWh per ton x cost per ton = equivalent coal fuel savings.

Oil

Step 1: Avg. Btu per gal of oil x 42 gal per bbl = Btu per bbl ÷ avg. Btu per kWh = kWh per bbl

Step 2: The project's 1983 hydro generation ÷ kWh per bbl x cost per bbl = equivalent oil fuel savings.

Natural Gas

Step 1: Avg. Btu per cf of natural gas x 1000 cf per Mcf = Btu per Mcf ÷ avg. Btu per kWh = kWh per Mcf

Step 2: The project's 1983 hydro generation ÷ kWh per Mcf x cost per Mcf = equivalent natural gas fuel savings.

In Table 4 the equivalent fuel for each company is based on a survey conducted May, 1985. For power purchases, the fuel listed is based on most likely source. Where permitted and when available company-specific data was used from the 1983 Uniform Statistical Reports. Where necessary, the EEI 1983 Statistics on Fuel Used to Generate Electricity by the Electric Utility Industry was used.

In Table 6, Btu per pound of coal, Btu per gallon of oil and Btu per kWh are national averages from the EEI 1983 Statistics on Fuel Used to Generate Electricity by the Electric Utility Industry. Company-specific fuel cost data are used from The Cost and Quality of Fuels for Electric Utility Plants (DOE/EIA-0191, 1983).

Appendix B

Municipal Utility Consequence Calculations: Errors and Answers

The municipal utilities, in Congressional testimony given last year by Gordon Hoyt from the City of Anaheim's Electric Department, claimed that the combined cost to PGandE customers of losing the Mokelumne, Rock Creek-Cresta, and Haas-King River hydro projects would "be no more than $18 million annually."[1] That compares to an actual customer impact put by PGandE at $147.5 million a year. The Hoyt $18 million figure was based on work by the municipal utilities' "economic consultant" -- the firm of R. W. Beck.[2]

Fortunately, the "study" referred to by Mr. Hoyt was included in the hearing transcript at pages 659-680 -- and its errors are not hard to find.

The Beck report argues that:

> "About 3/4 of the energy from the relicensed hydro will supply load requirements of Northern California [municipal] utilities... and will not have to be replaced by PGandE." Exhibit B, at p. 661.

Having made the suggestion that there will be no adverse impact on PGandE's customers from diversion of their hydro resources to northern California municipalities (Santa Clara, Palo Alto, etc.), the Beck report asserts that the only adverse consequences will come from "replacing project energy which will supply loads in southern California." (Exhibit A, p. 662.) Beck's elimination of rate impacts resulting from the diversion of these projects to northern California municipalities is just plain nonsense -- as a direct example will illustrate.

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[1] Testimony of Gordon Hoyt, Hearings before the House Subcommittee on Energy Conservation and Power, 98th Cong.2d Sess. (1984) p. 438.

[2] See Hearing Transcript supra at pp.659-680.

1. Mokelumne Take Over

The City of Santa Clara (a "northern California" municipality) is after PGandE's Mokelumne River Project. According to the Hoyt/Beck theory, loss of that facility (which currently provides PGandE customers with low cost capacity and with guel cost savings measured by the cost of producing an equivalent amount of power in a thermal plant), will produce *no* adverse rate effects. Neither Mr. Hoyt nor the Beck report explain how that can be true -- only insinuating that because Santa Clara currently buys part of its power at wholesale from PGandE (the rest coming largely from the federal government) there will somehow be no harm. But look at the facts. PGandE's fuel costs must be allocated to every kilowatt hour of electricity it produces and sells. If Santa Clara takes away the Mokelumne Project and simultaneously reduces its wholesale purchases from PGandE, the reduction in generation may indeed be balanced by a loss of sales. *But*, the combined effect of such a combined reduction in generation and sales will be a decrease in the overall number of kilowatt hours of electricity which PGandE produces and sells. Since a hydro project uses no fuel, Mokelumne's loss will not reduce PGandE's fuel costs. With the same fuel costs spread over fewer kilowatt hours, the average cost of each kilowatt hour to PGandE's remaining customers *must go up*![4]

The Beck report argues that loss of PGandE's hydro projects will eliminate the incidental expenses associated with their ownership and operation. (Exhibit A, p. 662.) Reduced ownership and operating costs certainly can be netted against the adverse consequences of takeover and PGandE *has done so* (at an even higher level than Beck used) in arriving at the $147.5 million direct consequence figure. But there is another incidental effect of take over, not reported by Beck, that will *increase* the injury to PGandE's customers.

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[4] The situation might be compared to that existing in a dry valley where some water comes from a communal spring (inexpensive) and some water has to be imported (expensive). If one rancher suddenly seizes for his exclusive use the local water supply that the community used to share, the valley's overall need for water won't change -- but the proportion of expensive, imported, water used by the other valley residents must go up.

The Hoyt/Beck claim that diversion to northern California municipal utilities won't affect PGandE's customers is based on the status of the City of Santa Clara, _et al_. as PGandE wholesale customers. As we have seen, project loss to those wholesale customers will result in increased rates by forcing the same fuel costs to be spread over fewer kilowatt hours of power. It is _also_ true that the loss of wholesale revenues from Santa Clara will force PGandE's remaining customers to pick up an increased share of the costs of PGandE's system.[5] _Both_ the increase in proportionate fuel cost payments and the rate increase resulting from the reduction in wholesale revenues must be considered in establishing actual customer consequences, wherever a project is lost to a wholesale customer. The Hoyt/Beck report simply ignores _all_ rate impacts of loss to cities like Santa Clara.

For the Mokelumne Project, the actual increased cost to PGandE's customers that would result from loss to the city of Santa Clara, _after_ subtracting reduced ownership costs, would be _$53.6 million a year_.[6]

2. Rock Creek-Cresta and Haas-Kings River Take Overs

The Hoyt/Beck testimony does admit that the diversion of one-third of the power from PGandE's Rock Creek-Cresta and Haas-Kings River Projects to southern California cities will impose _new_ costs, since those cities are not PGandE customers and diversion of hydro power to them will not be accompanied by any decrease in the demand on PGandE's system. (Hearings, p. 661.) Since the sales (demand) on PGandE's systems will remain the same, while the generation (supply) has been reduced, new sources of electricity must be acquired.[7]

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[5] In the dry valley analogy we looked at in fn. 4, this effect might be seen in terms of the costs necessary to distribute water and to acquire and import outside water. Seizure of the community's spring will eliminate future maintenance costs for the spring, but the community will also lose the contribution to overall system costs formerly made by the marauding rancher.

[6] Based on 1983 costs and normal water conditions.

The Beck report confines its assessment of harm flowing to PGandE customers from the Rock Creek and Haas takeovers to only the 35 per cent of their output that will flow to southern California.[8] As with the Mokelumne case, it completely fails to mention the adverse fuel cost and base rate impacts of diversions to northern California members of the Rock Creek and Haas takeover consortiums now buying wholesale power from PGandE (e.g. Alameda, Healdsburg, Lompoc).

There are also a number of northern California participants in the Rock Creek and Haas takeover attempts (Palo Alto, Roseville, Gridley, SMUD) who actually buy very little or no power from PGandE. As non-customers, diverting the power to them has the same effect as sending it south to Anaheim or Riverside, i.e. a loss of generation without reducing load. There is no indication that acquisition of Rock Creek and Haas by these cities will be accompanied by sales back to PGandE, let alone sales at less than replacement cost prices. Sales by municipal utility systems are not regulated. One contestant for a PGandE project has already stated that it wants to sell the power back to

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[7] In terms of the dry valley we looked at in footnotes 4 and 5, acquisition of a PGandE hydro project by Anaheim is like seizure of the valley's communal spring by a foreigner and removal of its water to another valley. Instead of just a shift in the costs paid by a majority of consumers, new and expensive water quantities will have to be created or imported from the outside to make up for the loss.

[8] As best we can determine, the Beck report came fairly close to the cost to replace power going to southern California, even though it made no allowance for capacity replacement. The Beck report price was $40.3 million a year (Exhibit A, p. 663) -- the figure should have been $41.7 million.

PGandE, but only at full "avoided cost" prices. Cf. Tuolumne Regional Water District Application for Project 1061 at B-7.[9]

The combination of customer, non-customer, northern and southern California municipal interests represented in the Rock Creek-Cresta and Haas-Kings River takeover attempts, actually threatens PGandE customers with rate increases of $93.9 million a year.

3. Combined Errors

To summarize -- our analysis shows that the Hoyt/Beck/APPA testimony:

1. Ignores all adverse impacts of a Mokelumne Project take-over.
   Resulting Error..........$53.6 million a year

2. Ignores all adverse impacts of the Rock Creek-Cresta and Haas-Kings River takeovers with respect to the roughly two-thirds of those projects being sought by northern California entities, and understates the impact of power going to southern California.
   Resulting Error..........$75.9 million a year

TOTAL ERROR $129.5 million a year

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[9] Going back to the dry valley analogy, acquisition by a northern California entity not currently buying wholesale power from PGandE presents the situation where a valley resident with his own special source of water, grabs the community spring and then either sells the water to outsiders (in which case, it must be replaced) or sells the water back to the other valley residents at imported water prices.

4. Actual Impacts

To reach the actual annual impact on PGandE's customers, it's necessary to add the total errors in the Beck report ($129.5 million) to the small amount of impact that Beck conceded ($18 million):

TOTAL ERROR	$129.5	million a year
BECK NUMBER	+ $ 18	million a year

COMBINED IMPACT ON PGandE CUSTOMERS OF MOKELUMNE, ROCK CREEK-CRESTA AND HAAS-KINGS RIVER TAKEOVERS......$147.5 million a year[10]

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[10] It must finally be noted that the *long-term* impacts of takeover are also missing from the Hoyt/Beck/APPA "analysis." Eventually every lost generating facility must be replaced as a utility's remaining customer load grows. The fact that some takeovers may reduce wholesale purchases only affects the *timing* of that needed replacement.

When looking at the overall issue of hydro project relicensing, replacement costs probably provide the best measure of both value and eventual consequences. By calculating rate impacts using a detailed analysis of the differences between customer and non-customer acquisitions, PGandE has provided a precise short-term fit to its own special situation. However the results do somewhat *understate* the magnitude of the long-term threat.

SUPPLEMENTAL STATEMENT OF

FREDERICK W. MIELKE, JR.

Pacific Gas and Electric Company

[Re: S. 1260]

Before The

SUBCOMMITTEE ON WATER AND POWER

of the

SENATE COMMITTEE ON ENERGY
AND NATURAL RESOURCES

ELECTRIC CONSUMERS PROTECTION ACT: S. 426

Hearing: June 11, 1985

June 25, 1985

F. W. MIELKE, JR.

SUPPLEMENTAL STATEMENT RE: S. 1260

As requested at the Subcommittee hearings held June 11, 1985, I am submitting these comments on the most recent hydro relicensing bill introduced in the Senate -- S. 1260 authored by Senator Daniel P. Evans of Washington.

1. Municipal Relicensing Preference [S. 1260, Sec. 5; new § 15(c)(1)(A)]

The starting point, and perhaps the ending point, must be S. 1260's proposal to create an unfair and unjust relicensing preference for municipally run utilities over existing project licensees and their customers. The evidence received at the hearing on June 11th was overwhelmingly against a municipal relicensing preference and the harm it would visit on the vast majority of American consumers. I believe that the following points emerged quite clearly:

A. **Hydro Relicensing Is A Consumer Issue. Every Takeover Attempt Represents An Effort By One Group Of Consumers (Those Seeking Takeover) To Enrich Themselves At The Expense Of Another Group (Those Already Served By The Project).**

The adverse impact of takeover on consumers served by existing hydro projects was clearly detailed and explained in testimony from every utility company witness. It was confirmed by testimony from the National Association of Regulatory Commissioners and every impartial witness.

B. There Is No Sound Excuse For Discriminating Against The Consumers Served By Existing Hydro Licensees.

The hearings provided particularly strong evidence that any relicensing system that discriminates against utility company customers in the manner proposed in S. 1260 is absolutely unacceptable. My statement identified 114 million people, the vast majority of American consumers, who now rely on utility company hydro plants. It also recorded a long and distinguished list of governmental, labor, business, agricultural and consumer associations, firmly opposed to municipal relicensing preference. Witnesses representing the South, the Northeast, the Northwest and the Middlewest -- described consumer majorities throughout the country depending on utility company hydro projects. The evidence that municipally-run utilities already enjoy a grossly disproportionate share of our nation's hydro resources was completely uncontradicted.

The day is long past when municipal utilities could argue that they needed subsidies from the rest of America's consumers to "get started." The Sacramento Municipal Utility District has its own hydro project (FERC 2101) with eight separate powerplants, its own nuclear power plant (Rancho Seco), one constructed geothermal plant with another on the way, and a heavy dose of "preference" power from federally created hydro plants. Its favored residents and industries already enjoy far more hydro power and far lower rates than their neighbors served by PGandE. The City of Santa Clara's combination of power from federal hydro projects (over 40%) and average cost-based wholesale rates from PGandE, has created an 80% industrial load able to compete with businesses served by PGandE at a far lower energy cost. The City of Anaheim boasts participation in a whole series of projects and a $1 billion, tax-free warchest (G. Hoyt Statement, p. 5, fn. 2). The Clark-Cowlitz Joint Operating Agency lives a permanently secure existence under the protection of the Bonneville Power Administration. Seattle City Light is proud of its position of nearly complete self-sufficiency, getting 85% of its power from independently constructed licensed hydro projects.*

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*To its credit, Seattle City Light also expresses real reservations about any preference running against an existing licensee and its customers (R. Hardy Statement, pp. 2, 4).

Nourished by special preferences in both initial licensing and federal power marketing, strengthened with growing commercial and industrial loads, and armed with tax-free financing -- today's municipal utilities, already a privileged minority, clearly neither deserve nor need a hydro relicensing preference at the expense of the utility company customers whose rates made the projects possible in the first place. The municipal utilities' case for discrimination in hydro relicensing simply cannot be made.

C. In A System That Accords Equal Rights To All Consumers, No "Tie-breaking" Element In The Analysis Should Ever Favor Taking A Project Away From An Existing Licensee And Its Customers.

My own state where a number of major relicensing cases have already started, provides a good test ground for measuring the merits of any municipal relicensing preference. Three California municipally-run systems, two in northern California and one in southern California, argued at the June 11th hearing that they should be favored over utility company consumers. As of June 11th, 138 northern California cities were formally on record with letters and resolutions opposing municipal relicensing takeovers -- that number has now grown to 142. 118 municipalities have similarly registered their opposition to municipal relicensing preferences in southern California. The roster of state-wide organizations opposing takeovers in California, including the County Supervisors Association, the state Farm Bureau Federation and the California Building and Construction Trades Council, speaks for itself. The San Jose Mercury-News, the San Francisco Chronicle, the San Francisco Examiner, the Oakland Tribune, the Los Angeles Times, and a host of other newspapers throughout the state have examined this issue and firmly editorialized against municipal relicensing preferences. Finally, both Senator Alan Cranston and Senator Pete Wilson, representing all of California's consumers, appeared at the hearing on June 11th and decisively confirmed both their co-sponsorship of S. 426 and their opposition to any municipal relicensing preference.

The public sentiment against municipal relicensing preferences is clearly accurate. There is absolutely no justification under today's conditions for preferring municipally-run utilities over utility company customers. The most telling evidence against favoring municipally run utilities over existing licensees and their customers may have been elicited by Senator Evans in his questioning of municipal utility witnesses. Forced to assume equal consumer equities on both sides (by considering the case of one municipality seeking to take over the project of another municipality) both Mr. Alex Radin for the APPA and Mr. Randall Hardy for the City of Seattle testified unhesitatingly that the existing licensee should be favored, in recognition of both the equities and its position as a "good steward." In the same vein, and with members in both camps, the International Brotherhood of Electrical Workers also testified firmly that any "tie" resolving mechanism should operate in favor of the existing licensee and its customers -- whether that existing licensee be a company or a municipality.

And there you have it. When consumers are treated as equal before the law, as they must be treated, any fair-minded person will agree no preference should be given against existing licensees. The municipal relicensing preference, now found in S. 1260, is a perversion of the principles that must guide Congress in any relicensing legislation.

2. Compensation [S. 1260, new § 15(d)(4)]

S. 1260's compensation provision proposes to supplement "net investment" with "50 percentum of the additional cost to the existing licensee of providing the equivalent amount of the least-cost alternative electric energy to its customers for the term of the new license." [S. 1260, new § 15(d)(4)] While this provision would be a step in the right direction, I have an obvious problem with its adequacy and a perhaps not so obvious problem with its terms.

I made it clear in my testimony that, based on my own knowledge and experience, any utility with confidence in its own plan and a real need for a project would compete and would be willing to pay just compensation for the acquired project. Based on PGandE's direct experience with contested relicensings, my testimony also detailed the problems created when "competition" is distorted by a campaign to snatch away a valuable consumer resource for a pittance. With the windfall hanging in front of them, no real cost factors restrain the extravagance with which a "competitor" will propose project additions and/or other concessions in an effort, in effect, to buy the result. The pressure that process puts on an existing licensee and its customers is enormous. Unnecessary additions are economically wasteful and environmentally destructive -- but such proposals will follow inevitably from any price that fails to reflect the real value of the facility being sought.

Thanks to other testimony produced at the hearing -- we now know that any city that really wants a facility should feel comfortable with paying just compensation for it. Witness Von Raesfeld from the City of Santa Clara boasted of his city's participation in the construction of new energy projects. In fact, the recent newspaper articles he cited at the hearing (copies are attached as Exhibit A to this supplemental testimony) detail the City of Santa Clara's plan to build an "energy empire." The articles also contain proof of the ease with which a municipally-run utility can obtain necessary capital through its ability to offer investors freedom from income taxes. Finally, the articles also point directly to the real beneficiaries of the special privileges extended to Santa Clara -- industrial firms which now soak up 80 percent of the city's low energy rates.

We agree with Mr. Von Raesfeld that his construction of new facilities is good for the public as a whole. We also agree with the obvious conclusion that he should be building more of such facilities, instead of trying to rip-off PGandE's customers by taking existing hydro projects for "net investment."

More significantly, the proudly asserted willingness of the municipal utilities to construct new generation facilities gives us direct evidence that municipally run utilities are willing to pay current value prices for generation facilities (The articles in Exhibit A cite $624 million to be expended for one, yet to be constructed, hydro project). It is perfectly clear that any rational municipal utility would gladly pay just compensation for an existing hydro plant -- with no construction risk, no financing risk and a proven record of performance. Against that proof, S. 1260's proposal, a proposal that would allow existing plants to be seized for only half their value, falls needlessly short of real fairness for the millions of consumers now dependent on existing hydro plants.**

The language "least-cost alternative electric energy" is something of a mystery. It is not clear why this standard is selected as opposed to one that directly measures short and long-term customer impacts. If intended simply as a direction that such impacts are to be reasonably or even conservatively established, I believe it would be better to say that. The risk is that this language will be interpreted so as to compel consumers to suffer shortage and risk as "least-cost alternatives," while those profiting from the windfall grow fat on underpriced power. That would be a most misdirected result.

** Concerns were expressed at the hearing about the ability of "just compensation" to reflect the actual value of the project being taken. Congress, however, clearly believed that "just compensation" would be equivalent to actual value when it enacted Public Law 278 in 1953 to protect municipal utilities from the "net investment" measure in Section 14(a). The courts have had little difficulty in preventing an acquiring entity from taking advantage of situations where, but for that entity's involvement, a "licensee" or even a "lease" would likely have been renewed. See Almota Farmers Elevator & Warehouse Co. v. U.S. (1983) 409 U.S. 470, 475, 477. Any doubts on these issues of interpretation can easily be resolved in Committee Report language.

3. Pending Cases [S. 1260, Sec. 5; new § 15(e)]

Before turning to the portions of the bill dealing with licensing procedures and public interest criteria, I would like to briefly address S. 1260's extraordinary provision that would prevent whatever reforms the bill may contain from affecting any "pending" proceedings regardless of whether or not any regulatory or judicial decisions have been reached and acted upon. [S. 1260, Sec. 5; new § 15(e)]

PGandE's customers are now at risk in four "pending" relicensing cases, none of which has gone to decision or even to hearing -- due in equal part to our opponents' original request that all "preference" issues be settled before hearing and the Commission's current view that that is a logical way to proceed. If S. 1260 contains any reform favorable to electric consumers, it makes no sense to deny that reform in pending cases. To do so would cruelly discriminate against millions of utility company customers now threatened in cases where no definitive action has occurred. I can see no excuse for this sort of provision except in cases where final decisions have already been reached and significant rights have been altered based on those decisions. Only one case has even gone to Commission hearing, let alone decision. That case, Merwin, is still on active appeal. At all times, all parties have been fully aware of the likelihood that a Congressional solution to the relicensing problem would be sought and, very likely, obtained.

S. 1260's proposed new § 15(e) would cause discriminatory and wholely unnecessary harm to millions of innocent consumers were it to appear in legislation accomplishing genuine relicensing reform.

4. Time Term [S. 1260 Sec. 5, new § 15(c)(2)]

S. 1260 would propose to reduce the conventional relicense term from fifty to thirty years. In my opinion, there should be no such arbitrary shortening of the license term where substantial project improvements are being made. With respect to projects where new investment is not being made, the Commission is currently exercising its discretion to provide shorter terms. That discretion is healthy and should not be limited by a new, inflexible, limit.

5. Procedure [S. 1260, Sec. 4, striking old § 14(b); S. 1260, Sec. 5, new § 15(b)(1)]

S. 1260 contains a number of provisions apparently intended to control relicensing in such a way as to come to a concluding simultaneous filing. In part, these changes may be directed to the so-called "last right of amendment" under which municipal utilities have asserted a right to always copy an existing licensee's proposals, right on into the hearing process.

In my opinion the "last right of amendment" is a myth. Section 7 does provide that for initial licensing a municipality will have a preference provided the plans for the project are deemed by the Commission equally well adapted, "or shall within a reasonable time to be fixed by the Commission be made equally well adapted..." Once the non-applicability of municipal preference to relicensing is made clear, the secondary language about a period "to be made equally well adapted" poses no separate problem. Without a municipal relicensing preference, both parties are treated equally under the Commission's rules.

The Commission has been evolving its regulations relating to relicensing procedures. PGandE has problems with some of those regulations, but hopefully the process will eventually yield a sound result. S. 1260's proposal to come to a final, simultaneous filing [S. 1260, Sec. 5; new § 15(b)(1),(b)(2)] has real merit. But cutting off all amendment a year before license expiration is much too abrupt in the context of litigation that may well extend for years, through periods of dramatic change in economic conditions and technology.

6. Criteria [S. 1260, Sec. 5]

S. 1260 proposes to substitute a list of specific public interest criteria for Section 10(a). Section 10(a), as it stands, has ample public interest breadth. Its requirement for comprehensive "utilization" requires inquiry into the extent to which the projects' benefits will be spread widely to consumers. As FERC put it in its Merwin decision:

> "Today, consumers receive the benefits of a particular hydroelectric development through computed rates and are thus said to "utilize" the particular power." Pacific Power and Light Co., Project No. 935-000, 25 FERC ¶ 61,052 at 61,192, fn. 36.

The Supreme Court, in what has become known as the High Mountain Sheep case, declared quite specifically that:

> "The test is whether the project will be in the public interest. And that determination can be made only after an exploration of all issues relevant." Udall v. F.P.C., 387 U.S. 428, 450 (1967).

Given § 10(a)'s position as the Act's existing public interest standard, any listing of factors for consideration should be arranged to complement § 10(a). If appropriate, such supplementary standards can easily be signalled through Committee Report language. With the above in mind, I would offer these reactions to S. 1260's listed criteria:

1. "economic impact upon customers served by the existing licensee." [S. 1260, Sec. 5; new § 15(c)(3)(A)]

   Comment: This is the sine qua non for any public interest analysis. It is well put.

2. impacts on "efficient systems operation and reliable electric service" [S. 1260, Sec. 5; new § 15(c)(3)(B)]

   Comment: This is also a sound factor.

3. "plans...to protect, mitigate and enhance fish and wildlife" [S. 1260, Sec. 5; new § 15(c)(3)(C)]

   Comment: This is the factor the Supreme Court specifically found to be already encompassed in licensing decisions in the High Mountain Sheep case. 387 U.S. 428, 450. If Section 10(a) is to be supplemented in this area, it should be made clear that the applicant's actual capabilities are to be considered in assessing the relative merits of any "plans". More importantly, so long as compensation can fall anywhere short of full market value, this criteria should signal the need to consider the costs of any given proposal along with its benefits. Without such protection, there is the obvious danger of applicants using the anticipated windfall to "bid" for the project.

4. "energy efficiency programs" [S. 1260, Sec. 5; new § 15(c)(3)(D)] Here again it is important that an applicant's capabilities and its past performance, along with relevant regulatory rules and limitations, be considered in evaluating the applicant's real commitment to conservation.

5. "comprehensive plans" [S. 1260, Sec. 5; new § 15(c)(3)(E)] While accurately reflecting the importance of state and regional concerns, this provision slights the virtues of the river-by-river approach appropriate for a majority of hydro projects. Because agreement with state agencies is a

conventional relicensing feature, relevant state concerns are already captured in the present process. I'm afraid this provision would introduce more complexity and delay than its potential planning advantages would warrant.

6. Missing Criteria: One major problem with only listing specific criteria is the fact that anything not listed may not be considered. For instance, Section 10(a)'s concerns with sound development and with broad utilization remain important public interest concerns and clearly must be preserved. Other important elements are relative rate advantages already enjoyed by a challenging utility and the need to confine analysis to only those who will actually use the power for their own customers -- as opposed to simply selling it at a profit as a middleman. (An element addressed in S. 403.) All these public interest considerations should be reachable under

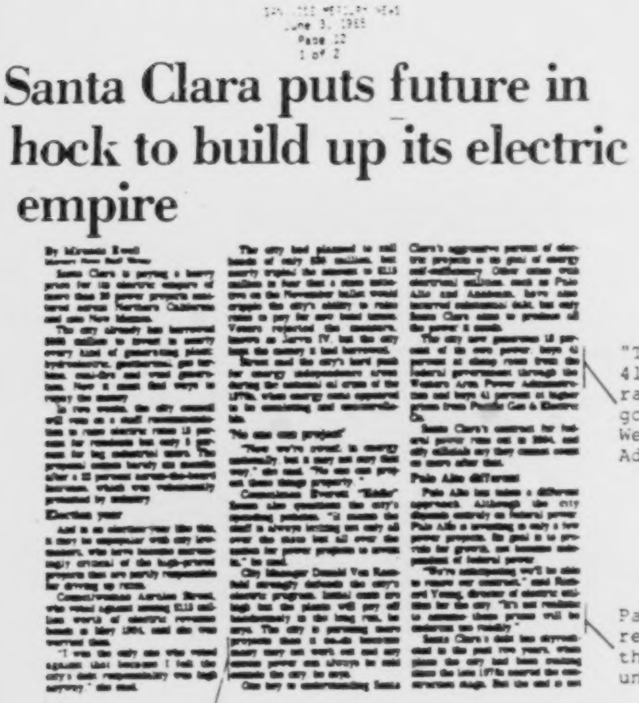
§ 10(a)'s umbrella -- but may fall out if only a detailed list is provided.

Conclusion

S. 1260, so long as it contains a municipal relicensing preference and falls short of assessing full and fair compensation, is emphatically not in the public interest. My comments have gone beyond those issues in an effort to fairly respond to Senator Evans' careful attention to this issue and to his request for full and pointed comments.

* * *

EXHIBIT A



SAN JOSE MERCURY NEWS
June 3, 1985
Page 12
1 of 2

Santa Clara puts future in hock to build up its electric empire

"The city now ... buys 41 percent at cheap rates from the federal government through the Western Power Administration."

Palo Alto: "It's not realistic to assume those prices will be undercut too readily."

"The city is pursuing more projects than it needs because many may not work out and any excess power can always be sold outside the city..."

in sight.

The city has not begun to finance several major electric projects it is planning, including a share in a major new transmission line to bring power from the Pacific Northwest to California, two hydroelectric projects and a geothermal project that has already cost the city $7 million for drilling and studies.

Nor has the city arranged financing for the Mokelumne River hydroelectric plant, which it is trying to take over from PG&E. The city already has spent hundreds of thousands of dollars in court battles to take over federal licenses for the plant, an issue still pending before the federal Energy Regulatory Commission.

Industry spurred growth

The phenomenal growth of Santa Clara's electric utility has been spurred almost entirely by the needs of industry, not by those of residents, Scott says.

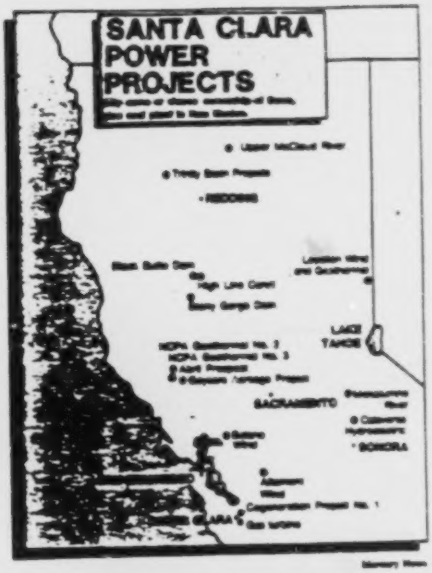
"The burden has to be shifted to the people who consume the most, and that's industry at this point," he said. "Residents should get a better break on their utility bill."

Currently, rates are the same for all users, from the largest businesses to the tiniest apartments.

But, per unit of power, it costs more to read meters, maintain power lines and mail out bills to homeowners than to deal with big customers, the staff says.

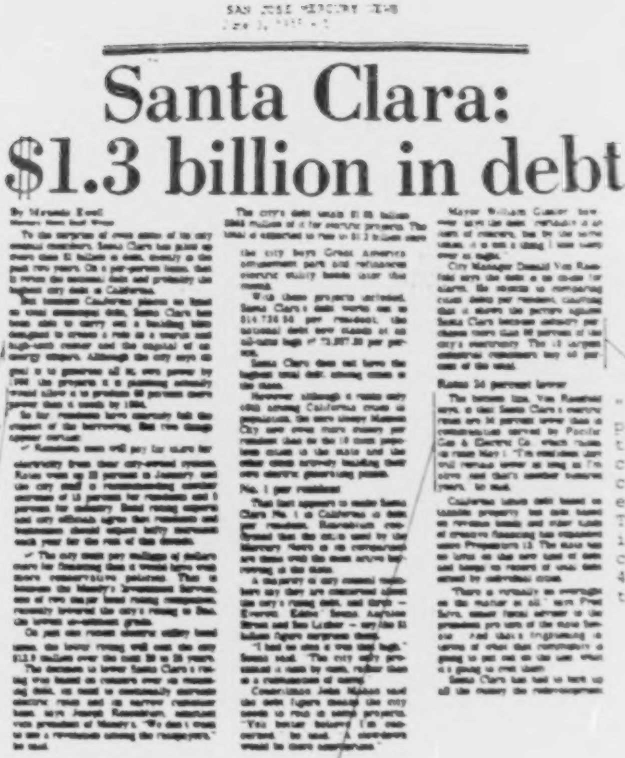
The staff contention is based on a recently completed study showing that rates for residents would have to be raised 50 percent if they were to pay the true cost of providing service to them. Industry already pays its full cost of service, the report says.

That is why the city council will be asked in two weeks to approve a larger rate increase for residents than for big industrial users.


SANTA CLARA POWER PROJECTS
Upper McCloud River
Trinity Basin Projects
REDDING
Black Butte Dam
High Line Canal
Stony Gorge Dam
Lassen Wind and Geothermal
LAKE TAHOE
NCPA Geothermal No. 2
NCPA Geothermal No. 3
SACRAMENTO
Stanislaus River
Calaveras Hydroelectric
SONORA
Solano Wind
Altamont Wind
Cogeneration Project No. 1
Gas turbine
SANTA CLARA

Mercury News

"The phenomenal growth
of Santa Clara's elec-
tric utility has been
spurred almost entirely
by the needs of industry,
not by those of residents..."



SAN JOSE MERCURY NEWS

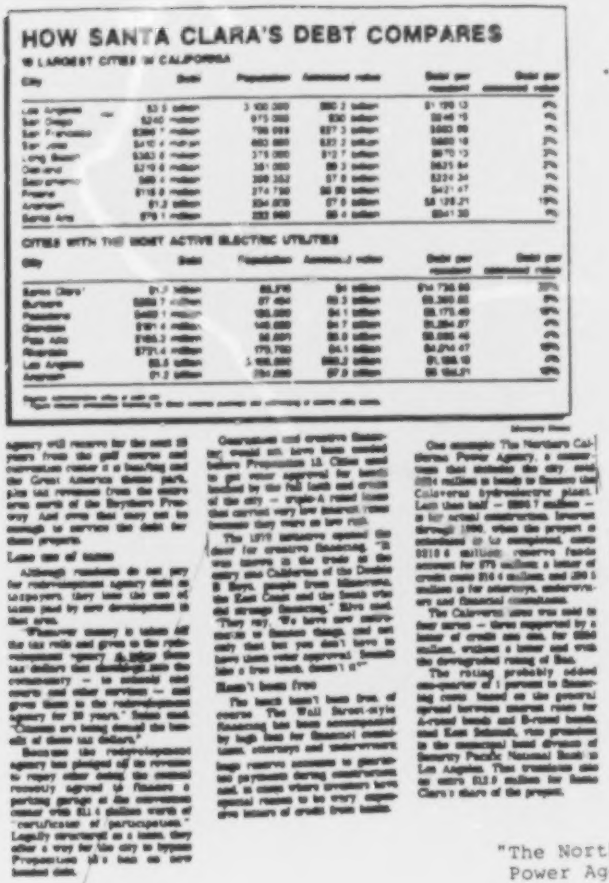
Santa Clara: $1.3 billion in debt

"...the capital of an energy empire."

"... the projects it is planning would allow it to produce 60 percent more power than it needs by 1994."

"...industry purchases mo… than 80 percent of the city's electricity. The 10 large… industrial customers bu… 40 percent o… the total."

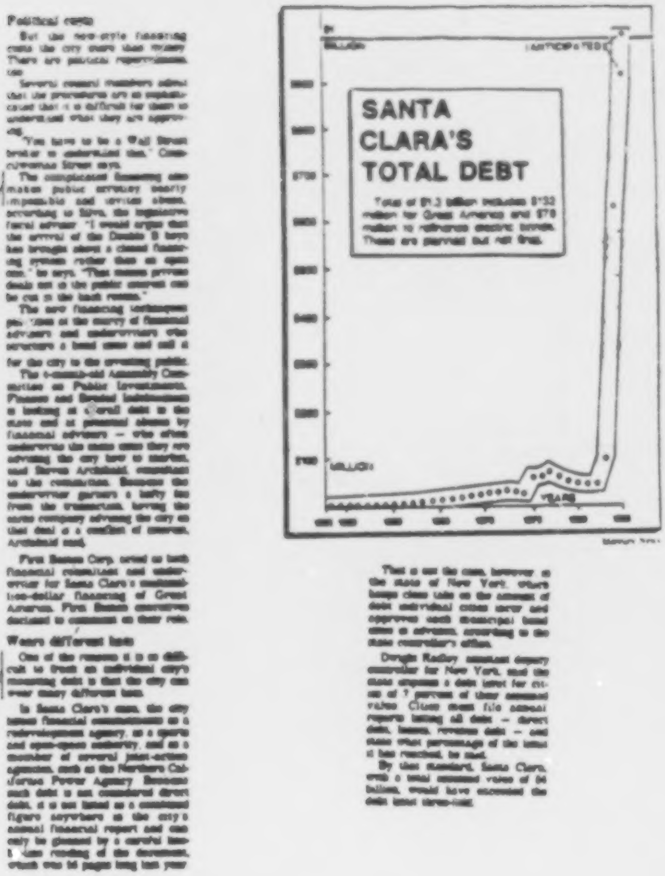
The bottom line, Von Raesfeld says, is that Santa Clara's electric rates are 34 percent lower than in communities served by Pacific Gas & Electric Co., which raised its rates May 1. "I'm confident they will remain lower as long as I'm alive, and that's another hundred years," he said.



HOW SANTA CLARA'S DEBT COMPARES

"The Northern California Power Agency, a consortium that includes the city, sold $624 million in bonds to finance the Calaveras hydroelectric plant."

The 1978 initiative opened the door for creative financing."


SANTA CLARA'S TOTAL DEBT
Total of $1.3 billion includes $132 million for Great America and $78 million to refinance electric bonds. These are planned but not final.
BILLION
ANTICIPATED
MILLION
YEARS

"The complicated financing also makes public scrutiny nearly impossible and invites abuse."

"One of the reasons it is so difficult to track an individual city's mounting debt is that the city can wear many different hats."

Senator **Evans** [presiding]. Thank you, Mr. Mielke.

Now how do you want to divide the remainder of the time? Remembering that there is approximately 9 minutes left. That will give us some time. I might let everyone know that we will have to recess the hearings at 12:30, and we will resume at 2:00 o'clock. So we do—or approximately 12:30. We do want to have ample time for Senator Johnston and myself to ask questions of this panel. So please continue.

STATEMENT OF DAVID F. BOLENDER, PRESIDENT, PACIFIC POWER & LIGHT CO.

Mr. **Bolender**. I will go next. My name is Dave Bolender. I am president of Pacific Power & Light Co. I will very quickly summarize my testimony, because I have heard at least twice all the points made in my testimony this morning, and I am sure you have heard them more often than that.

We happen to have been 9 years fighting for the Merwin Project. We now have a 30-year relicense, and it is in the appeals court, and we expect to be some time yet uncertain over the outcome of that court action. We have 11 more projects in the next 20 years that will go through the same process unless Congress acts and does something to streamline the process.

The costs so far on Merwin and employee manpower, consultants, and legal fees from both sides has been exorbitant, and I do not think it should continue. Congress must act to clarify Federal intentions on this matter. The current law is vague, and certainly creates uncertainty among utility operators on hydroelectric projects as to how long they are going to have the benefit of those projects for the customers.

The second point, which has also been made here today and I want to repeat to emphasize it, is that we are asking you to look at this not as a public-private power fight, because it is not, it really is a consumer issue. The very point of private electric utility, investor-owned utility customers who happen to live in the territory served by investor-owned utilities that they should be considered second-class citizens is the real question.

I think they have every right for the power from the relicensed projects just as much as the other citizens of the country. Thank you.

[The prepared statement of Mr. Bolender follows.]

PREPARED STATEMENT OF DAVID F. BOLENDER BEFORE THE WATER AND POWER SUBCOMMITTEE OF THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES REGARDING FEDERAL POLICIES ON HYDROELECTRIC PROJECT RELICENSINGS

JUNE 11, 1985

Senator Murkowski and members of the committee: My name is David F. Bolender, and I am president of Pacific Power & Light Co., an investor-owned utility based in Portland, Oregon.

I appreciate this opportunity to speak with you about federal policies regarding the relicensing of hydroelectric projects. My company is concerned about this issue because we rely on hydro projects to serve about 35 percent of our customers' needs.

Pacific Power is the Northwest's largest electric utility. We serve about 655,000 customers in six states: Oregon, Washington, Wyoming, Montana, Idaho and California.

Today, I would like to make two major points about hydroelectric relicensings.

First, Congress must act on this issue to clarify federal intentions. Current law is, at best, vague about how public agency preference should apply in relicensing cases. As a result, we foresee prolonged and costly legal battles every time public agencies challenge efforts by private utilities to relicense their hydroelectric projects.

Secondly, I want to urge you to avoid the trap of considering this just another battle between public and private power. That's simply not the case.

I see this as a confrontation between customer groups. Congress must decide whether the simple fact of living within public power territory should give one group of citizens power to rob another of an inexpensive electricity resource.

I see no reason why it should.

Federal laws should protect all citizens, regardless of whether they live in private or public utility territories. In this case, I think Congress should enact legislation that would protect residents of private utility territory from an unfair loss of their low-cost hydroelectric resources, while at the same time ensuring the best use of the public resource.

Pacific Power has first-hand experience with these issues. Our application to relicense the Merwin Dam project in Washington state was the first contested case decided by the Federal Energy Regulatory Commission.

Our experiences with Merwin illustrate the points I am making today.

Pacific has owned and operated Merwin since 1929, when we secured a 50-year federal license for the project. Today, Merwin is capable of generating 135 megawatts, and it is an important component of Pacific's three-dam system on southwestern Washington's Lewis River.

When we started the process of relicensing Merwin in 1976, we were challenged by a joint operating agency formed by the Clark and Cowlitz public utility districts in southwestern Washington.

The JOA argued that the public utility "preference" status gave Clark and Cowlitz first claim on the Merwin license. We have fought the Merwin battle for almost a decade now, first before FERC and now in the courts. The decisions have see-sawed — a result, I believe, of the vague manner in which federal law treats hydro relicensing cases.

In the most recent action, FERC awarded Pacific a 30-year license to continue operating Merwin. That action, which overturned an earlier ruling by a FERC administrative law judge, is on appeal to the U.S. Circuit Court of Appeals.

In the next two decades, we're scheduled to renew 11 federal licenses, which allow us to operate a total of 26 hydroelectric plants. Based on our Merwin experience, I fear it could take us several years to complete each of those relicensing efforts.

These prolonged battles are expensive and they make our resource planning difficult. Our customers can't afford such costs and such uncertainty.

We need clear federal legislation on this matter so we can know what to expect. Only then will we know how to plan for our customers' electricity needs.

I understand why Clark and Cowlitz want to take Merwin away from our customers: Existing hydro projects generate the least expensive electrical power available.

Power from Merwin costs slightly more than half a penny per kilowatt-hour. By comparison, power from our newest coal-fired plant costs more than 10 times as much -- approximately 7 cents per kilowatt-hour.

Utility regulations require us to pass the benefits of our low-cost resources through to our customers. These regulations generally did not exist in the early part of this century, when Congress passed the Federal Power Act to ensure that public resources are used to benefit the public -- not private corporations.

So, today, because of modern utility regulations, I can assure you that it is our customers -- and not our shareholders -- who benefit from the low-cost Merwin power. It helps keep their power costs low by mitigating the impact of our higher-cost resources.

For the same reasons, it is our customers who would ultimately suffer financially if we lose Merwin. They would have to pay for the replacement power, which undoubtedly will cost more than the Merwin power.

In our testimony at the FERC proceedings, we established that Merwin's replacement value is $832 million. That figure is based upon the cost over 50 years of acquiring 135 megawatts of electricity that is of the same quality as the Merwin power.

As a result of those costs, our 655,000 customers would lose much more than the 120,000 Clark and Cowlitz customers would gain, should we lose Merwin to the JOA.

I don't think it's fair of Clark and Cowlitz to ask our customers to bear those costs.

Making the matter even worse is the fact that Clark and Cowlitiz propose to pay a grossly low price for Merwin, based on original cost minus depreciation.

Under that formula, Clark and Cowlitz would pay only $9.4 million for Merwin, an amount that would barely put a dent in the replacement power costs which our customers eventually would face.

That simply does not make sense. Why should one group of citizens pay a 50-year-old price for a valuable resource -- while forcing the citizens who helped pay for that resource over the last 50 years to purchase a replacement at current costs?

I doubt that public agencies would be as interested in taking over investor-owned utility resources if they had to pay a fair price for them.

Clark and Cowlitz, along with the Northwest's other publicly owned utilities, already have first claim on the inexpensive power generated at the region's federal hydro projects.

That, together with the hydro projects directly owned by public agencies, means that the Northwest's publicly owned utilities have priority access to about 85 percent of the region's hydro capability, while serving only about 40 percent of the region's population.

Preference on hydro relicensings would give these public agencies ability to take over the small portion of the region's hydro capacity which now benefits private utility customers.

That is not fair. Private utility customers deserve some protection. We do not believe that public power preference applies -- or should apply -- in hydro relicensing cases.

Pacific Power supports the Electric Consumers Protection Act, as embodied in S. 426 and H.R. 44. This legislation will ensure that control of a hydro project will rest with the original licensee unless FERC finds that the licensee cannot be expected to operate the project in the best public interest.

The legislation also would ensure that utilities receive just compensation, should they lose a hydro project in a take-over.

This legislation will ensure fair treatment for all citizens -- regardless of whether they live in public or private utility territory. That is all we're asking for at Pacific Power: Fair treatment for our customers.

Thank you.

Mr. MIELKE. Jesse Vogtle of Alabama Power Co.

Mr. VOGTLE. Mr. Chairman, Joe Farley, the president of Alabama Power Co., is absent unavoidably and I am sponsoring his testimony and ask that it be copied into the record.

Senator EVANS. It will be in the record.

STATEMENT OF JOSEPH M. FARLEY, PRESIDENT, ALABAMA POWER CO., AS PRESENTED BY JESSE VOGTLE

Mr. VOGTLE. I have a brief summary statement. Alabama Power owns and operates over 1.5 million kilowatts of hydroelectric generation in its service area.

This hydroelectric generation is an important part of the company's overall generation mix, including coal and nuclear, which provides reliable electric service to over 1 million electric retail consumers and a number of wholesale distributors in the company's service area.

We support S. 426 for all the reasons which have been recited earlier by Mr. Mielke and notably Senator Denton from Alabama. The issue is to protect the customers who have paid for these hydroelectric projects. That is the principal issue.

We also support S. 426 because it includes a just compensation standard to replace the inadequate net investment takeover formula for compensating the existing licensee upon relicensing to a competing applicant, and we are quite happy, too, that Alabama Public Service Commission has gone on record unanimously supporting S. 426, and I believe a letter signed by the three commissioners have been delivered to several of the subcommittee members.

That concludes my statement.

[The prepared statement of Mr. Farley follows:]

STATEMENT OF JOSEPH M. FARLEY, PRESIDENT OF ALABAMA POWER COMPANY, ON S. 426, THE ELECTRIC CONSUMERS PROTECTION ACT OF 1985, and S. 1219, THE FAIR COMPETITION IN HYDROELECTRIC LICENSING ACT OF 1985, BEFORE THE SUBCOMMITTEE ON WATER AND POWER OF THE COMMITTEE ON ENERGY AND NATURAL RESOURCES OF THE SENATE

June 11, 1985

My name is Joseph M. Farley. I reside in Birmingham, Alabama and have been President of Alabama Power Company since 1969. Prior to becoming executive vice president of Alabama Power in 1969, I was a partner in the law firm which served as general counsel for the Company. My educational background includes a degree in mechanical engineering from Princeton University, graduate work in business at the University of Alabama, and a law degree from Harvard Law School.

Background and Purpose of Testimony

I appreciate the opportunity to testify concerning legislation regarding relicensing of hydroelectric projects under the Federal Power Act. Licensing, construction and operation of hydroelectric projects has consumed a substantial amount of my time as a lawyer and as a member of Alabama Power's management team. I have been counsel to the Company in preparing and pursuing license applications to the Federal Power Commission for hydroelectric projects subject to the provisions of the Federal Power Act. I had major responsibility as a lawyer and later as an executive for the acquisition of lands and flood easements necessary to the development of hydroelectric projects on several river systems in Alabama. In addition, I served as counsel to the Company in contracting for the purchase of construction services, machinery, equipment and other facilities necessary to the development of several of the hydro projects now owned by Alabama Power Company. During my service as counsel to the Company, I was principal attorney for the Company in litigated proceedings under Section 10(d) of the Federal Power Act relating to the establishment of amortization reserves for licensed hydroelectric projects. The Section 10(d) proceedings related to the determination of "net investment" in a licensed project for ratemaking as well as Section 14 takeover purposes. Since joining the Company, I have continued to be involved in the prosecution of applications for hydroelectric licenses and the evaluation of the economic impact of hydroelectric projects on the more than one million customers served by Alabama Power Company.

This experience has taught me the value of the development and maintenance of hydroelectric resources for consumers of electricity in the State of Alabama. The management of Alabama Power Company learned this lesson long before energy costs skyrocketed in the 1970's due to the OPEC Cartel, unbridled inflation, and government regulations which imposed additional cost burdens on other energy sources. Even in the early days of the development of an electric system in Alabama, the value of the hydroelectric potential in Alabama rivers was recognized by the founders of Alabama Power. That recognition has continued to this day.

Alabama Power Company today serves electric consumers in 56 of the 67 counties of the State of Alabama. We provided electric service at retail to 1,034,026 customers as of December 31, 1984. This constituted approximately 62% of the total electric customers in the State of Alabama at that time. Rates to retail customers of the Company are regulated by the Alabama Public Service Commission under comprehensive regulatory provisions which test rates and rate proposals on the basis of conventional cost of service principles. The electric rates of municipal electric systems are not regulated by either the Alabama Public Service Commission or the Federal Energy Regulatory Commission (FERC). Except for a limited number of large industries served directly by the Tennessee Valley Authority (TVA), the remainder of the retail customers in Alabama are served by municipally-owned electric distribution systems and rural electric cooperatives. Alabama Power serves many of these municipal and cooperative systems at wholesale under rates regulated by the FERC. Of a total of approximately 4,100,000 citizens in Alabama, Alabama Power serves - either directly at retail or indirectly through wholesale distributors - approximately 2,892,000 or 71% of the people of Alabama. The balance of such citizens are served directly or indirectly by TVA, Alabama Electric Cooperative, Inc. or the Southeasten Power Administration.

As of June 1985, Alabama Power has 8,306.3 megawatts of capacity to provide service to its retail and wholesale customers. This includes a net capacity increase available because of the recent completion of the Company's redevelopment of its hydroelectric project at Mitchell Dam on the Coosa River and excludes capacity committed to unit power sales. The mix of this capacity is as follows:

	Megawatts	%
Hydroelectric	1,582.7	19.1
Fossil Steam	5,003.6	60.2
Nuclear Steam	1,720.0	20.7
Total	8,306.3	100.0

The capacity of the hydroelectric resources which the Company has built to serve its customers represents a significant commitment by the Company and a significant resource for the Company's customers. Alabama Power Company was primarily a water power company during the first several decades of its service to the public. Its statewide transmission system was developed on the basis of connections to and between these hydro resources. As electric demand in the Company's service area exceeded the capacity of hydroelectric resources, Alabama Power developed fossil fueled and then nuclear fueled steam electric generating capacity to meet the demand. As the cost of steam electric generation increased, the relative value of hydroelectric resources became more and more apparent.

Retail customers represent approximately 93% of our Company's load while the wholesale municipal and cooperative customers represent about 7% of that load. For ratemaking and cost allocation purposes, facilities of the Company are allocated to these customer classes on the basis of load contribution. Therefore, today, 93% of the hydroelectric capacity of the Company - about 1,470 MW - is devoted to serving our retail customers.

The State of Alabama is blessed with hydro resources. A total of 2,947 megawatts of hydroelectric capacity has been developed in the state. The capacity developed by others in Alabama (with minor exception) has not been subject to the Federal Power Act licensing process in which the Company could have participated as a competing applicant. Many of the valuable hydroelectric project sites in Alabama, as is true throughout the nation, were specifically withheld from possible development by private corporations, such as Alabama Power Company. In Alabama, such sites were set aside for development by the federal government through the Corps of Engineers or TVA with municipalities, other local governmental agencies or rural electric cooperatives being given preference in the purchase of electric power from projects developed at such sites.

It is significant for purposes of analyzing S. 426 and other pending legislation related to relicensing that only 49.9% of the total hydro capacity in the state is devoted to retail customers of Alabama Power Company. Thus, even though such customers represent approximately 61.6% of the total customers in the state, they are the beneficiaries of less than one-half of the hydro capacity in the state. The remainder of such capacity is devoted principally to service to customers of municipal and cooperative electric systems.

A comparison on the basis of energy generated from Alabama hydroelectric capacity reflects an even greater imbalance against retail customers of Alabama Power. Hydroelectric facilities in Alabama produced approximately 11,563 GWH of energy during 1983 and only 4,996.6 GWH (about 43%) were used to serve retail customers of Alabama Power Company. The major portion of this energy was produced by hydroelectric facilities owned by TVA or developed by the Corps of Engineers with respect to which public bodies and cooperatives have a statutory preference.

This bias in favor of municipal and cooperative electric systems in Alabama is even worse on a national basis. In the United States, while investor-owned utilities serve 76% of all electric customers, they have only 32% of the hydroelectric generating capacity in the nation.

While general equitable considerations might call for some review of the imbalance in the allocation of hydro resources, I am not testifying today in favor of a change in the present allocation of hydroelectric resources in Alabama or in other areas of the United States. I am, however, appearing in support of the principles reflected in S. 426, the legislation proposed by Senator Wallop and 27 other Senators from across the nation as of the time of this writing. The principles expressed in S. 426 will provide Alabama Power and other current licensees under the Federal Power Act a full and fair opportunity to maintain for their customers the licenses for hydroelectric resources after the current license terms expire. The alternative suggested by other proposed legislation as well as by the City of Bountiful decision, is to allow municipal electric systems to take these low energy cost resources which are almost paid for away from existing licensees and their customers, at ridiculously low prices, even though such municipal systems already have a statutory preference in the licensing of newly developed projects and are already the object of preferential treatment under laws regulating the sale of power from existing projects owned by TVA and other federal power marketing agencies.

In the City of Bountiful decision, it is apparent that the FERC approached the determination of whether municipal distributors should be granted a preference at the time of relicensing on the basis of a guess as to the intent of Congress in adopting the Federal Power Act in 1920. My view of the plain language of the Act and its history causes me to reach a conclusion different than that reached by the Commission in the City of Bountiful decision. Indeed, the Commission itself came to a different conclusion in the Merwin relicensing proceeding. Regardless of the controversy over the meaning of the language and its history, Congress now has the opportunity, and I believe the responsibility, to address this matter from a policy standpoint, to assure that both fairness and the overriding public interest govern the future allocation of hydroelectric resources which are relicensed under the Federal Power Act. The Congress that adopted the Federal Water Power Act some 65 years ago recognized the difficulty of a long term forecast of what the public interest would require in future years and indicated an expectation that the best interests of the public regarding hydroelectric projects would be reexamined in light of today's realities.

From the viewpoint of broad national policy, it is difficult to understand why the so-called public power entities initiated this controversy. In view of the already existing imbalance in the allocation of hydroelectric resources that so heavily favors customers of municipal and other public agency systems, it would appear that the proponents of municipal special privilege should be content with their success in diverting so much low-price hydroelectric power to their customers which represent a small minority of the public. My difficulty lies not in understanding the strained technical and linguistic interpretations which are being urged as to existing law, but in understanding the indifference to the interest of the public which characterizes the promotion by this special interest group of a policy designed to deprive customers of regulated utilities of the hard-earned benefits of hydroelectric resources built to serve them. This special interest group spearheaded by the American Public Power Association (APPA) would take these valuable benefits which presently are distributed among 76.5% of the public and give additional and disproportionate aid to the approximately 13.6% of the public who happen to live in an area served by a state or municipal electric system. I was impressed by the characterization of this campaign by Commissioner Bagley of the California Public Utilities Commission when he undertook to paraphrase Winston Churchill and stated last year before the House Subcommittee on Energy Conservation and Power of the Committee on Energy and Commerce that "never have so few tried to take so much from so many ... for so little."

It is argued by some that the preference for the municipal distributor is intended to operate only as a "tie breaker" where all other aspects of two competing license applications are equal. The difficulty with that argument is: (1) Even though no two license applications are equal (even those xeroxed by municipal distributors so as to approach equality), there will be a temptation by those charged with carrying out the law to decide hard issues based on a perceived Congressional preference;* and (2) establishing the municipals as preferred parties creates an impression of Congressional bias in favor of customers of such distributors over customers of investor-owned utilities.

No statutory preference should be established against the interest of the customers of the current licensee. During the initial license term, they have paid rates which include depreciation charges based on the cost of the facility to the licensee. They deserve to get rates in the future which reflect the past application of depreciation charges and the resulting diminished rate base on which current and future rates will be predicated.

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* In City of Dothan, Alabama v. Federal Energy Regulatory Comm'n, 684 F.2d 159 (D.C. Cir. 1982), where a municipality challenged the issuance of a preliminary permit to an equally preferred state instrumentality, Judge Abner Mikva, formerly a member of Congress, criticized the FERC in his dissenting opinion for routinely abdicating its responsibility to examine closely the facts on disputed matters of public interest in hydroelectric development matters. He noted that FERC opted instead for an administrative system which leads almost universally to a determination that competing applications in each case are "equally well adapted to develop, conserve, and utilize in the public interest the water resources of the region." Through this definition, FERC allows the difficult permitting decision to be governed by the regulatory preference for applications filed first in time. In fact, of 120 comparable instances of competing applications, FERC never found a "better adapted" application and always utilized the regulatory preference for first filed applications to make its decision. "When the tie-breaking rule is invoked in each and every case, one must conclude that FERC's definition of a 'tie' is somewhat extraordinary." 684 F.2d at 166. The use of the municipal preference in relicensing as a "tiebreaker" would be subject to the same administrative approach.

My testimony will explore the development of hydroelectric resources in Alabama and explain how the present unfair imbalance in the allocation of hydro resources came about. I will then describe the impact upon customers of Alabama Power should the state and municipal preference be expanded to relicensing situations. This includes economic impacts and the loss of other valuable benefits. I will also comment on the proposed alternatives to S. 426 - S. 403 and S. 1219.

The central message of my testimony is simple. Unless the principles reflected in S. 426 are followed in the relicensing of hydroelectric projects under the Federal Power Act, the current imbalance in allocation of hydro resources, which is already disadvantageous and unfair to customers of regulated utilities, is likely to become worse. Eventually, if the municipal electric systems have their way, our hydroelectric resources will all be devoted to this special interest group, which is a small portion of the consuming public.

Development of Hydro Resources in Alabama

It has not always been as easy to recognize the value of hydroelectric capacity as it is today. In the early part of this century, it took men of great vision and dedication to develop a plan for financing and construction of projects that would not be amortized except over many years. In Alabama, men like Patrick Lay, James Mitchell and Thomas Martin had that vision and that dedication. They recognized with clarity that which municipal officials with limited tenures, often four years or less, can hardly be expected to recognize: Sometimes you must take significant financial risks which will not be rewarded except over the long run. The risk which the early pioneers of hydro development in our state took was an extreme one. Indeed, the capital for the construction of the first significant hydroelectric facility in Alabama could not be raised in the United States, but had to be obtained from English investors. In those early days, there was no developed market for the electric power which would be generated from these projects. Rather, markets had to be created or stimulated by these pioneers themselves.

Even in later years, after electricity became a necessity and an item of everyday usage in the life style of our nation, the determination to build hydroelectric projects could entail significant risks to utility managers and investors. Contrary to a common misperception, the development of hydroelectric projects is very expensive. The developer of a hydro project must acquire by purchase or condemnation, which both require payment of just compensation, the private property interests required for the project's reservoir and flood easements, impoundments, tailrace, powerhouse, transformation yard, transmission line corridors, access roads, recreational facilities and other necessary facilities. In addition, the erection of the dam, powerhouse and other project appurtenances is usually a large and expensive construction project. It is only over the long run that both the customer and the investor realize the significant benefits of hydroelectric power.

I can recall vividly the concern and anxiety on the part of the executives of Alabama Power Company and the management of The Southern Company, which supplies equity capital to Alabama Power Company, in the 1950's over the determination to go forward with Project No. 2146 on the Coosa River, which is Alabama Power's largest hydroelectric development. These corporate managers raised serious questions, such as: Will demand for electricity grow to justify the development planned? Will the cost-benefit analysis turn out to be wrong? Will rate regulators later determine that the investment was imprudent and refuse to permit recovery of the investment through rates? Risks assumed included not only the risks of planning and financing but also the risk of selecting the proper sites which avoid the potential geological and other physical problems which could plague a project. The risks were assumed and the economic benefits from the hydroelectric developments of Alabama Power Company are now being enjoyed by its customers. If one should be inclined to discount such risks, they need only read current reports of multiple refusals by state regulatory commissions to permit recovery by utilities of investments which some commissions determine, after-the-fact, should not have been made.

These were private investments collected and utilized for the efficient implementation of technology developed by private initiative but to be used for the benefit of the public. Supporters of a statutory preference for municipal systems in the context of relicensing engage in a spurious claim that a municipal preference at relicensing is merely a process to return to the "public domain" a public asset or resource that was temporarily assigned to the existing licensee for private use. Some participants in the debate have even gone so far as to characterize the licensed projects of investor-owned utilities as merely "leased property" which should return to the federal landlord at the expiration of the term of the original license. Such claims misconceive and mischaracterize the legal nature of the federal interest involved in these projects, the economic nature of the projects themselves, including the use to which the projects have been put by the existing licensee. I have prepared for the benefit of this subcommittee and attached as an exhibit to this statement a memorandum setting out as a matter of fact, case law and Congressional history the legal nature of the federal government's interest in these projects which are licensed under the Federal Power Act.

Most importantly, however, those who propose to take hydroelectric projects away from investor-owned utilities at relicensing in the name of the "public interest" are either mischaracterizing or choosing to ignore the realities of how such projects are already used to serve the public interest. As the data to which I referred earlier demonstrates, the customers of those utilities constitute by far the largest segment of the public.

Utility licensees are generally subject to a legal duty to provide safe, reliable and economical electric service to all persons within their service territories at uniform and nondiscriminatory rates approved by regulatory authorities. Such licensees have planned, financed, constructed, maintained and operated the affected hydro projects over the term of the original license for the benefit of all the customers of their service territory, including the municipal electric departments and cooperatives served under FERC-regulated wholesale rates. In Alabama and many other states, every project has been certificated as necessary and convenient to the public service by the state regulatory commissions and legally dedicated to the public service by the utility owner. Rate regulation by the Alabama Public Service Commission has in effect imposed charges on the Company's retail customers to pay for the hydro project over the depreciable life of the project. Such regulation allows a return on the undepreciated investment in a project only. To put the matter differently, to the extent a licensed project has been depreciated, the project cost does not appear in the rate base on which rates are predicated and customers pay nothing more for the investment so depreciated.

With respect to the energy available from a hydro project, the benefits of low cost energy flow directly to the public through fuel clauses incorporated into approved rate schedules. In summary, I cannot imagine a more efficient and economical use of these projects. As part of an integrated system of a regulated utility, they serve a greater public good for more members of the public than if, by operation of a municipal preference, they were relicensed to serve the fewer customers of a municipal licensee.

There is another consideration involved with respect to the licensed projects in the State of Alabama. As owner of the beds of all navigable streams in the state, the State of Alabama has granted water power companies such as Alabama Power Company the right to build dams across the beds of the streams upon the statutory condition that the entity:

> ... must sell such power, heat, light or electricity [from the project] to any person or persons, municipal or other corporations, in order in which requests or demands are made for such light, heat, power or electricity ...

Section 10-4-321, Code of Alabama (1975). While the interest of the state and that of companies such as Alabama Power Company are subject to the power of Congress under the commerce clause of the federal constitution, Congress would be ignoring the predicate on which the state allowed use of the stream beds if it were to require that such projects be turned over to municipal distribution systems which don't serve the broad public but provide service to a limited, special interest group of consumers.

As I have pointed out, municipal electric systems are already the beneficiaries of the output of the majority of hydroelectric resources in Alabama and the nation. This is in part due to early and frequent action by Congress to remove whole river systems throughout the nation from the Federal Power Commission's licensing jurisdiction, usually reserving to itself or other governmental entities the opportunity to develop the hydroelectric potential of such river systems to the exclusion of other developers. Congress allowed no competition for the opportunity to develop many of the most valuable hydroelectric sites in the country. Preemptive legislation guaranteed a sizeable share of hydropower for "preference customers" even if at the expense of the United States Treasury. This contributed to the present national imbalance in the distribution of hydropower benefits. Furthermore, because such projects were not subject to licensing under the Federal Power Act and likewise are not subject to relicensing, competitive or otherwise, the preferred parties have no fear of losing any of their benefits in any way similar to what they propose for the customers of regulated utilities.

Hydroelectric resources developed in Alabama include many projects constructed in large part at taxpayer expense by TVA or the Army Corps of Engineers which are not subject to the Act's licensing provisions. The TVA hydroelectric facilities in Alabama comprise in excess of 1100 megawatts of capacity. These facilities were generally built in the 1930's and 1940's with direct congressional appropriations. The capacity of TVA projects is devoted primarily to municipal and cooperative distribution systems, however, TVA does serve several large industrial loads and federal installations directly. In addition to public funding, municipal and cooperative distribution systems served by TVA were given even greater special and preferential treatment at taxpayer expense because TVA electric rates reflect only the portion of the investment in each project which TVA itself has allocated to electric power generation. Project investment and cost allocated to navigation, flood control and other purposes are not considered in setting electric rates for these preferred customers. The federal licenses granted to Alabama Power assure that the Company's hydroelectric projects also serve flood control, navigation, recreational and other public interests; but 100% of the investment made by Alabama Power Company must be recovered from its customers in electric rates.

Even though these federally financed facilities have now been in service for the principal benefit of the municipal and rural cooperative customers of TVA for up to 50 years, no one is now suggesting that their customers be deprived of such facilities. The fundamental issue in the pending legislation before this Committee is whether a preference should be created which would deprive customers of investor-owned utilities of the economic benefits of the hydroelectric generating plants currently devoted to them. The proponents of a preference to municipalities on relicensing under the Federal Power Act have a distorted sense of fairness and equity when they in effect suggest "What's mine is mine and what's yours is mine."

In addition to the Alabama hydro resources developed by Alabama Power and TVA, certain Alabama hydro sites were not available for development by private licensees under the Federal Power Act because under the River and Harbor Act of 1945 (59 Stat. 10) Congress reserved them for federal development. The Army Corps of Engineers eventually developed many of these sites. The hydroelectric output of these dams has been marketed by the Southeastern Power Administration (SEPA), one of the power marketing agencies of the Department of Energy. Approximately

245 megawatts of capacity has been developed in Alabama by the Corps of Engineers with funds appropriated by Congress if one counts one-half the capacity of the two facilities on the Chattahoochee River which forms the boundary between Alabama and Georgia. This 245 megawatts is marketed pursuant to the "preference" provision of Section 5 of the Flood Control Act of 1944 (16 U.S.C. 825s). The marketing policy of SEPA calls for eventual allocation of all of the capacity and energy from such resources to municipal and rural electric cooperatives.

A comparison of the resource mix providing power to customers of these preference distributors with that of Alabama Power's retail customers reflects the impact of this preference. In 1984, a residential customer of Alabama Power was served with an energy resource mix consisting of approximately 14% hydro, 52% fossil-fired generation and 34% nuclear generation. The residential customers of Alexander City, Alabama (a typical municipal electric distribution system that purchases power from Alabama Power and SEPA) not only get their load ratio share of Alabama Power's hydro generation, they also get an allocation of energy available from SEPA. As a result, 26.6% of their energy requirements were met with low priced hydroelectric energy in 1984. When this beneficial resource mix is added to the municipal distributor's immunity from taxes and its ability to issue tax free bonds to finance its electric system, the cost of electricity experienced by the municipal system is obviously far below that of Alabama Power without adding the additional preference urged for them under the relicensing provisions of the Federal Power Act.

Especially considering the existing preferences and unfair cost advantages, the institution of a municipal relicensing preference for hydro projects built to serve our customers is unwarranted and unsound public policy. S. 426 will do nothing more than allow existing licensees (including municipal and other licensees) a fair opportunity to maintain their licenses for projects already devoted to the service of their customers. It takes nothing from municipal electric suppliers. At best, it provides a reasonable opportunity for maintenance of the status quo in hydro matters, protecting the customers of the existing licensee from being forced to provide a huge financial windfall payment to a select group of customers of public power entities for no good reason.

Some opponents of S. 426 have claimed that the legislation means more than is written on the page and that it should be defeated because private utilities are undertaking to eliminate all the subsidies and advantages provided to public power by the rest of the taxpayers. First, it is mere chatter to suggest that this Congress cannot read, discern and control the language of legislation and its ultimate impact. Second, the circumstances surrounding this bill demonstrate that such exaggeration is plainly and obviously wrong. Stating our motive in simple terms, it is we who are trying to prevent them from taking our projects from our customers, not us trying to take some valuable benefit from them.

Another claim by the public power advocates is to the effect that S. 426 will diminish the alleged restraining influence municipal and cooperative electric suppliers might have upon the retail electric rates of regulated utilities. This is a spurious claim founded upon false premises. First, S. 426 imposes no costs on public power entities. The legislation would not operate to diminish any subsidies or cost advantages municipals or cooperatives already have over regulated utility companies. Second, the assumed relationship between the subsidized retail rates of municipalities and the regulated rates of private utilities is greatly exaggerated. Regulatory commissions have an almost universal legal mandate to set electric rates for public utility companies based upon the utility's cost of providing service. This includes, in one variation or another, a documented measurement of the revenues needed to cover operating expenses plus a reasonable return on investment devoted to public service, or rate base. The relative level of electric rates charged by publicly subsidized municipal or cooperative electric suppliers has no legitimate role in the regulatory determination. As a general proposition, regulatory commissions may not lawfully restrict electric rates, which are otherwise appropriate, on the basis of a comparison with rates from a municipal or cooperative.

In Alabama, electric rate cases are "wide open" in the evidentiary sense, yet no witness has ever offered evidence of a rate comparison between a municipal or cooperative electric supplier versus Alabama Power for the purpose of restraining or lowering the Company's retail electric rates. This includes Mr. John Wilson, who I understand will appear before this subcommittee on behalf of the American Public Power Association and who has testified as an expert witness in retail electric rate cases in Alabama. In sum, S. 426 does not impair the legitimate interest of public power systems, but is truly a consumer protection bill, operating to allow existing licensees an opportunity to prevent a huge and completely unjustifiable harm from being worked upon the majority of electric consumers in this nation.

Impact of Potential Loss of Hydroelectric Resources to Customers of Regulated Utilities

The unique value of a hydroelectric project is related to several immutable physical characteristics. First, because of the special hydrological, geological and topographical conditions required for a successful hydroelectric project, there are only a limited number of sites feasible for large scale economic development. Most of these have already been developed. Second, hydroelectric capacity generally is not firm baseload capacity because it is limited by the amount of available flows which vary from time to time. The most valuable use of hydro generation in areas such as Alabama is as peaking capacity to "top off" an integrated system of steam-electric baseload plants, allowing the system to limit or avoid using its least efficient/most expensive thermal units during peak periods. Few municipalities have complementary baseload generation and thus their use of the capacity available from a hydro project for baseload purposes would waste the greater potential value of use as a peaking power resource. At a time when legislative and regulatory authorities are placing great pressure on utilities to maximize the conservation or careful use of available energy resources, a legislative policy judgment encouraging the inefficiencies inherent in transfer of existing hydro facilities to municipal licensees which can't optimize their use is incomprehensible.

Even if the municipalities which would take over a hydroelectric project from an electric utility could utilize the project in an efficient manner, the existing licensee, which has developed the resource for service to its customers, will be left with an inefficient situation which must be rectified. The attached table shows the projects licensed to Alabama Power Company under the Federal Power Act. The table reflects license expiration dates, investment, capacity, replacement cost and other data which will be discussed later. By the year 2007, 79% of the Company's existing hydroelectric facilities will have been subjected to relicensing, and soon thereafter, by 2015, all but 7% will be the subject of relicensing. A fair opportunity to relicense these projects is obviously important to the customers of Alabama Power Company.

The possibility of losing the capacity and energy available from the Company's hydroelectric facilities can be quantified in terms of economic impact upon the Company's customers using a snapshop view which assumes the loss of those facilities as of the end of the year 1984. First, the customers of Alabama Power Company would feel a tremendous rate impact because of the loss of the extremely inexpensive energy generated from hydroelectric projects and the comparatively high fuel cost related to replacement energy from steam electric generation sources. In 1984, the variable cost of energy from the most recently added fossil unit on the Company's system was 2.8 cents per kilowatt hour while the average variable cost of hydroelectric generation was .12 cents per kilowatt hour. To illustrate the fuel cost rate shock that Alabama Power Company customers would feel if the Company's hydro projects were given to municipal electric systems, we have calculated that the Company's actual 1984 hydroelectric generation plus the additional generation available from 1984 river flows at the redeveloped Mitchell Dam (which began commercial operation April 1, 1985) equals 5,307,529,000 kilowatt hours. Assuming this energy could have been replaced from fossil-fired units on the Alabama Power system, the customers of Alabama Power Company would have paid an additional $142.7 million in energy costs during 1984.

Second, if these hydroelectric facilities were diverted from customers of Alabama Power Company to customers of municipal electric systems, the Company would have to replace some or all of the lost hydroelectric capacity. The Company's customers would feel a tremendous rate impact due to the cost of replacement capacity. For Alabama Power Company's system, the only realistic source of replacement capacity is fossil-fired steam electric generation, which, of course, is very expensive and is not as reliable as the lost hydro capacity.

Let's assume that the Company's hydro projects have been taken by municipalities which were not originally served from the Company's system or which have chosen to continue to take wholesale service from the Company so that the power from their newly acquired hydro project can be sold to the highest bidder, perhaps even Alabama Power Company. In such a circumstance, the Company's obligations to serve the electrical load requirements of its service territory have not diminished and, therefore, all the lost hydroelectric capacity must be replaced. In order to maintain the same level of reliability on the Company's electric system after loss of the Company's hydroelectric facilities, we estimate it would require investment in new capacity, corresponding fuel stocks and transmission additions amounting to $2.8 billion in 1985 dollars. Under this scenario, the combined annual cost of replacing lost capacity and energy which would be imposed on customers of Alabama Power Company would increase the annual revenue requirements of the Company for 1984 by more than $530 million. This would constitute an increase of approximately 24% in the rates of the Company's customers.

Even if it is assumed that the Company will be relieved of all obligations to continue serving municipal loads, the lost load will not equal the lost capacity. Under a scenario where the Company loses both the hydro facilities and all its municipal load, the cost of replacement capacity necessary to maintain the same level of system reliability for the Company's remaining customers and the increased fuel costs related to the lost energy will increase annual revenue requirements for 1984 by more than $451 million. The Company's remaining customers would have to shoulder a 21% increase in electric rates.

Admittedly, the windfall rewards for municipal distributors would be dramatic. If enough of these hydro resources had been diverted to municipal distribution systems to serve their 1984 energy requirements, their bulk power cost (fixed and variable) for 1984 would have decreased from around 3.7 cents per kilowatt hour to around 2.2 cents per kilowatt hour. This savings would have been at the direct expense of other citizens in Alabama who are served by Alabama Power Company.

While we feel the assumptions made in our analysis are conservative, we recognize that proponents of municipal preference on relicensing may attempt to pick at those numbers to distract attention from the inescapable basic conclusion: The grant of a municipal preference on relicensing threatens to cost the remaining customers of an existing licensee many millions of dollars. Our analysis attempts to quantify the impact of the loss on such customers. To assure, however, that the message does not get lost in accounting arguments, let me review, in a qualitative fashion, the benefits which our customers would lose.

A. Capacity Already Paid for by Customers.

Under state and federal rate regulation to which Alabama Power and most other investor-owned utilities are subject, the utilities are entitled to an opportunity to earn a fair return on their investment in hydro projects. In recent times, investors have not always received their entitlement. Nevertheless, the utility is permitted generally to receive a return of its investment through depreciation charges included in electric rates over the life of the project. At expiration of the original license, if the project is depreciated over the period of the license term, the initial investment in the project may approach being fully depreciated and the return allowed to the utility on the remaining project investment is relatively insignificant compared to the value of the project as an energy resource. With proper maintenance, a hydro project will last much longer than the initial license term. Thus, its true value at relicensing is its value as a source of low cost capacity and energy for the licensee's customers.

From the municipal distributor's viewpoint, a successful takeover at relicensing is simply a windfall. Its customers have paid nothing for the development and maintenance of the project, yet a fully-operational hydro project is an extremely valuable resource. As demonstrated by staff calculations in the Merwin case, the cost of actually developing the same capacity today ($731.7 million) makes the net investment or book value ($9.4 million) microscopic by comparison.

As shown on the attached table, the estimated replacement cost of Alabama Power Company's hydro facilities in 1985 dollars is $2,766,999,000. Assuming inflation at a rate of 8% per year, the replacement cost of these facilities at the expiration of the respective licenses will be a total of $18.1 billion while the net investment in such facilities at their license expiration dates will be only $364 million. If the municipal systems are allowed to take over these projects at relicensing because of a municipal preference and pay only "net investment" for the project works, they would get these facilities at a price which is approximately 2% of their true value.

B. Loss of Other Advantages of Hydroelectric Facilities.

Customers of existing licensees would suffer other significant consequences if they lost these resources. Customers require and expect a reliable source of electric power and public utility companies are obligated by law to provide adequate service in the most economic and efficient manner practicable. The most reliable electric system utilizes a mix of generation sources and other facilities to assure dependable electric supply under a myriad of unpredictable conditions. In regions fortunate enough to have water resources with significant hydroelectric potential, the system mix to satisfy the reliability requirements is benefited greatly by the development and proper use of such resources. This includes back-up and stabilizing generation as well as the well known benefit of low cost energy generation.

Such is the case with Alabama Power Company's system. As of June 1985, the Company has installed 1,582.7 megawatts of hydroelectric capacity on the Coosa, Tallapoosa, and Warrior River systems, representing 19.1% of the total Alabama Power Company generation capacity. This capacity is not only an economical source of energy; it also serves important system reliability functions in a manner which cannot economically be matched by any source of replacement generation which might be available to Alabama Power if the hydro projects were lost.

(1) Tie-Line Regulation (Automatic Generation Control).

Hydroelectric generating units are uniquely useful for regulating the supply of power on the electric system to match the continuously variable demand for power because they can be "loaded", or put into increased service, very quickly in contrast to most other forms of generation. Load on an electric system varies considerably throughout the day as peak periods of residential, commercial, and industrial usage are experienced. The large swings in load are normally met by anticipating and adjusting steam electric generation to the maximum economical and practical amount. When available steam electric generation has been loaded efficiently, however, hydroelectric generating units can be quickly loaded and unloaded at specific locations to adjust for transient load conditions.

All of Alabama Power Company's hydroelectric units may be loaded or unloaded efficiently and quickly, either at the plant or remotely from the Alabama Control and Dispatch Center in Birmingham. In addition, certain hydroelectric generating units can be switched to respond instantaneously and automatically to minor variations in system load. This capability is referred to as automatic generation control.

Electric systems can accomplish this load regulation without hydropower, but the ability to use hydroelectric resources for this purpose is extremely valuable. Where it is initially designed into the system, as in the case of Alabama Power, the removal of this capability because of loss of hydro plants at relicensing would require replacement steam capacity to provide this capability to ensure system reliability.

(2) Underfrequency Loading.

Alabama Power Company's electric system is integrated into a system grid which is interconnected with transmission networks encompassing a larger region. The frequency of this interconnected system is nominally maintained at sixty hertz. Under normal operating conditions, this interconnected system maintains this frequency level in a dependable and controlled manner.

However, there can be times when there is a significant mismatch between system load and electric supply. Under these conditions, the frequency level may increase or decrease outside of an allowable range. Alabama Power Company's hydroelectric and transmission system is equipped with overfrequency and underfrequency devices to sense this deviation in frequency. Since an uncorrected decrease in frequency below the acceptable range may contribute to a major system disturbance, the underfrequency device will automatically and rapidly increase generation of all hydroelectric units to maximum capability in an effort to offset the generation-load imbalance.

The dispersed locations of hydroelectric installations provides dependable protection against this frequency problem throughout the Company's service area. Without this emergency automatic loading capability, additional reserve capacity would have to be established to assure the same level of service reliability.

(3) Voltage Stabilization.

As load conditions change throughout the system service area, variation in voltage at points along the transmission and distribution network is unavoidable. Hydroelectric units provide a valuable stabilizing influence to minimize voltage fluctuations in the transmission network. In the event of a voltage fluctuation due to changing loads, hydroelectric units may be quickly brought on to provide system reactive capability to raise or lower the voltage at a specific location. Alabama Power Company's hydroelectric units are generally maintained in a motoring status (spinning reserve) when not loaded, thus serving as synchronous condensers continually regulating system voltage within prescribed limits.

Utilized in this manner, the hydroelectric generating units minimize system electrical losses by eliminating or reducing the need for automatic tap changing at power transformers, a process which consumes energy. Without availability of our hydroelectric resources, expensive capacitor banks would have to be installed to provide additional system reactive capability.

(4) Steam Generation Startup.

Fortunately, Alabama Power Company has never experienced a major areawide blackout; but we must plan our system to be able to recover quickly from such an event. In the event of an areawide blackout, the hydroelectric system would provide extremely valuable generation restart capability. Under the operating contingency plan presently in effect, the restart of Alabama Power's generating plants after such a blackout is predicated on supply of this restart capability by a core of hydroelectric generation located on the lower Coosa and Tallapoosa Rivers. These hydro plants and the connecting transmission are adequate for supplying the emergency power required to restart the critical steam generating plants. Without the availability of this hydroelectric capacity for this purpose, Alabama Power Company would be dependent upon expensive additional back-up generation facilities or upon resources of other utilities to provide electric power for this purpose. Installation of expensive combustion turbines to provide this capability would be highly undesirable because of the high cost of such replacement capability and the comparatively poor dependability of this source of generation.

(5) Overloaded Lines.

Under system peak load conditions, isolated occurrences of line overload conditions have been experienced. To correct these line overload conditions, hydroelectric plants may be brought on to supply needed generation at a specific point on the system to redistribute line flows. The dispersed locations of the Company's hydro plants throughout the service area are ideal for this purpose.

Without this capability, it could become necessary to interrupt customer load, increase loading at high cost resources or take other more costly measures in order to preserve the reliability of the electric system.

C. Other Public Benefits of a Fair Relicensing Opportunity for Regulated Utilities

In addition to the economic and system benefits of hydroelectric capacity which flow directly to the customers of the existing licensee, public utilities like Alabama Power contribute many other benefits to the public generally because of the Company's long term, wide spread and consistent involvement with and responsibility for the area's valuable hydroelectric resources. Alabama Power Company has provided the public benefits I am about to describe without cost to the public treasury. The incentive to research and develop benefits of this nature will not be as strong for a licensee which expects to lose its projects at the conclusion of the initial term of the license or where related projects on a river system previously licensed to one operator have the prospect of being divided between several different licensees. S. 426 will allow existing licensees to justify pressing forward with the often expensive efforts necessary to develop new ideas for the improved use of limited hydroelectric resources without fear that the projects which are the reason for their research may be taken from them without cause.

Alabama Power Company has a history of being an innovative developer of hydroelectric resources. Beginning with Lay Dam, which was placed in service in 1914, the Company has constructed hydroelectric generating facilities at fourteen locations on three major rivers--the Tallapoosa, Coosa, and Warrior. As economic and load conditions warranted, this system has been steadily improved by the addition of new generating units and refurbishment of existing units to assure continued dependability.

We recognize and appreciate the fact that our rivers provide a myriad of recreational and industrial opportunities to the citizens of the state. Because of the tremendous value of these resources, the Company has made and continues to make contributions to the state of the art in river and reservoir management to maximize the value of the resources and to preserve and enhance the quality of the biological ecosystem. In so doing, Alabama Power Company makes the best use of the hydroelectric facilities, considering a comprehensive perspective of the projects which includes efficient use for the benefit of electric customers.

(1) Turbine Aeration

Although hydroelectric operations do not normally add pollutants to the water passing through the turbines, it is an accepted physical fact that reservoir impoundments at times become thermally and chemically stratified. This condition may result in passing through the turbines water which contains a lower level of dissolved oxygen than waters not so impounded. Alabama Power engineers began a program of research during the early 1970's aimed at finding a technologically sound and economically feasible means of increasing the oxygen content of water passing through the turbines. A system referred to in the industry as "deflector plate" turbine aeration was pioneered by the Company during this program and our engineers maintain an active research program in the application of "deflector plate" aeration to existing and new hydro units. The Company has recently installed "deflector plate" aeration systems as an integral part of the new units at its Harris and Mitchell Dam generating plants.

Engineers and biologists employed by Alabama Power are credited with development of this concept of water quality enhancement, thus reflecting their understanding of the interaction of the various factors involved in the reservoir/water quality/ turbine operation relationship, and their technical ability to address and provide measures to enhance the level of dissolved oxygen in water below the dam and thereby the fisheries in that location. Several technical papers on this research have been published in recognized engineering literature. The technology has been accepted as a proven means of achieving significant improvement in dissolved oxygen, and is being used by other major utilities.

(2) Hydroelectric Modernization Program

One of the important advantages of hydroelectric generation as compared to alternative generation sources is the capability of quick loading of units from a central location. Alabama Power began centralized system operations from its Magella substation near Birmingham around 1914. Two dispatchers working alternate 12 hour shifts coordinated the functions pertaining to Alabama Power Company's electric system operations. As communications and electrical equipment technology advanced, the Magella center was continually upgraded. This facility provided a central control point for the Company's electric system until 1977 when the function was transferred to the new Alabama Control and Dispatch Center in Birmingham.

The Magella installation was precedent setting in providing a central point to coordinate both steam and hydro generation sources, combining this electric energy into a transmission network and then to a distribution network. Remote control of hydroelectric generating units from Magella was begun in the early 1960's. This equipment used analog telemetering. Communications with the hydro plants was by means of microwave--a new technology at that time.

During the late 1970's Alabama Power engineers and electronics experts voluntarily undertook a program of research and development aimed at designing a new state-of-the-art system to replace the aging analog system. It was recognized that modern digital computers could be coupled with monitoring and control equipment not only to improve the remote dispatch of the hydro units, but also to increase the amount of hydroelectric generation by better management of the reservoirs, and at the same time improve the effectiveness of flood control operations.

The obsolete analog equipment was replaced by a modern hydro control system, consisting of digital computers and electronic controls. A powerful computer developed by the Boeing Company under contract to Alabama Power serves as the heart of the system, receiving data via microwave from microcomputer based monitors and control terminals throughout the electric system. This hydro control system allows Company personnel to monitor the status of the generation and transmission network twenty-four hours a day. Actions can be taken instantly to adjust generation sources and to re-route power flow on transmission lines to assure the maintenance of dependable electric supply to the

Company's customers. Using this new tool, hydroelectric generation is always available to meet system needs.

(3) Hydro Data Acquisition System

Another major part of this system is the Hydro Data Acquisition System (HDAS). This system includes a greatly expanded network of rainfall and streamflow gages which are continuously monitored with the data being transmitted to the Alabama Control and Dispatch Center for recording and processing by the computer system. The final gaging network will include real time data from 84 rainfall gages and 33 stage gages located strategically throughout the Warrior, Coosa, and Tallapoosa drainage basins. At present about 33 percent of these gages are fully operational with 53 percent scheduled for completion by the end of 1985. The remaining 55 gages are scheduled for installation during the next four years. Critical hydro plant data is likewise monitored and transmitted to the central computer. This allows instantaneous assessment of the condition of the hydro system at any time, and provides maximum information for decision making.

To make maximum use of this information, Company engineers and systems analysts are presently engaged in developing a Hydro Optimization Program. Included in this program will be the real-time storage and retrieval of archival data including rainfall, stream and river stage, water quality and plant operating data. This program will provide the capability to convert stored data into hourly reservoir "in-flow" forecasts and thus optimize reservoir dispatch strategy. The program will also provide the capability to simulate and graphically display flood gradients on a real-time basis, and provide recommended actions for identification of and the minimization of potential damage areas. This program will also have additional benefits, including archival data retrieval for reports and studies, and data interchange with the Corps of Engineers and the National River Forecast Center in Atlanta. Communications and coordination with these agencies assure that critical decisions involving flood control are made with maximum knowledge of the condition of the various reservoirs, and assures that the coordination of the Coosa and Tallapoosa Rivers is such to minimize downstream flood stages.

In addition to improvement in flood control, the continuously updated real-time inflow forecasts will allow the hydro dispatcher to allocate the storage and release of water between reservoirs in such a way that the capacity and energy generation from the system is maximized. Initiation of hydroelectric generation based upon advanced knowledge that higher reservoir inflows will be experienced will allow the creation of additional power and flood control storage. This action produces increased amounts of hydroelectric generation, while also giving the important benefit of reducing peak spillway discharge rates.

Alabama Power Company's hydroelectric installations comprise a series of continuous projects on the Coosa, Tallapoosa, and Warrior Rivers. Although the projects may have different FERC licenses, the hydraulic process of passing water downstream creates a cause and effect relationship such that no one project can, or should, operate separately from the others. The release of water from an upstream project unquestionably affects downstream elevations and flows. Likewise, additional storage in an upstream project can reduce downstream elevations and flows. Operation by another licensee of one or more of such projects would impose a severe discontinuity in the concept of coordinated operations.

The experience and the technical capability of Alabama Power Company personnel make these advances in hydroelectric operations technologically possible. The benefits gained from total system development and implementation of this costly optimization program make the project economically viable. It would not be practical nor economical for any licensee to undertake a project of this magnitude for application to one or two projects. The efficiency of Alabama Power Company planning and implementing these improvements would be practically impossible if the cooperative participation of several different licensees with varying interests were required. The maximum benefits achieved in bringing together the disciplines of engineering, electronics, hydrology, and communications are possible only in an integrated, coordinated utility system. We believe that the innovative and forward looking contributions to the hydroelectric field resulting from voluntary management action at Alabama Power are significant benefits to our customers and the public generally. Without clarification of a fair opportunity to relicense projects built for and incorporated into the Alabama Power Company system, the prudence of investment in improvements such as I have described could be subject to question.

S. 426

S. 426 is a simple, straightforward approach addressing relicensing issues which have been argued at the FERC for the past several years and which are still being litigated in the federal courts. These issues involve two basic questions: (1) Whether a municipality because of its legal status should be preferred in the relicensing of an existing hydroelectric project to the detriment of the existing licensee and its customers? (2) If such a project is to be shifted in ownership to a new licensee, what compensation shall be paid to the existing licensee the customers of which have essentially paid for the project over the initial license term? Several hundred hydroelectric projects across the nation will come up for relicensing in due course. In each case involving a regulated utility licensee, the customers of the existing licensee stand to lose a very valuable and virtually irreplaceable resource to a smaller group of allegedly "preferred" customers at a tremendous financial loss to the forced givers and tremendous windfall financial gain to the takers. It is in the direct interest of the great majority of electricity consumers of this nation and the nation generally for Congress to address the uncertainties apparent in this issue and the questions of policy and fairness which are involved.

S. 426 focuses on these two issues and provides certainty in the law. It makes clear that no municipality will receive preferential treatment in the relicensing process merely because of its governmental status. The bill does not affect any other preferences or special treatments provided to municipal, state or cooperative entities in the Federal Power Act or any other state or federal law.

S. 426 directs FERC to apply the standards set forth in Section 10(a) of the Federal Power Act in evaluating all applications for a license for a project which is up for relicensing. These standards have been utilized by FERC and its predecessor, the Federal Power Commission, in the evaluation of competing license applications and objections thereto for more than sixty years. In a relicensing context, these standards are comprehensive and embrace all matters relevant to the development and use of a waterway, including the potential for economical redevelopment. Thus, S. 426 authorizes the Commission to continue considering the various aspects of each project proposed by competing license applicants including navigation impacts, flood control measures, recreational benefits, power capacity and energy values, effects of the project on water quality, fish and wildlife, and other environmental considerations. Likewise, under S. 426 the Commission would be authorized to continue giving consideration to the economic impact of a proposed project on the public including such matters as tax payments and rate impacts on the public to be served by competing applicants. Thus, under S. 426, the Commission's decision making will be focused upon the competing applicants' proposal for beneficial utilization of the water resource rather than the identity or status of the applicants. However, S. 426 does require the Commission to review the stewardship of the existing licensee in making its determination as to whether the existing licensee can meet the best adapted standard in Section 10(a) of the Act.

S. 426 would not require the Commission to change its regulations and practices concerning the requirement that any applicant for a hydro license submit data and studies relating to the standards embraced in Section 10(a) as has been the practice through the years. Rather, each applicant would be required to comply with Parts 4 and 16 of the Commission's regulations relating to license applications.

S. 426 addresses the matter of compensation due the existing licensee and its customers if the project license is to be issued to another party at relicensing. The bill requires that the Commission make a determination of the amount required to compensate adequately the existing licensee and its customers for the project it will be called upon to transfer in the event the project license is granted to someone else. S. 426, therefore, protects the customers of the existing licensees from an unfair loss in the event of a project takeover. Present facts, circumstances and policies simply cannot justify the taking of such a valuable and unique resource for less than just compensation.

Under S. 426, each applicant for a new license to a hydro project being relicensed would be required to compete on the merits of its application. The successful applicant would be required to establish to the satisfaction of the Commission that its application meets the Section 10(a) best adapted standard. The Commission would be required to examine carefully all aspects of all duly filed applications and issue the new license based on which application best serves the goals of the Federal Power Act and the public interest rather than the legal status of the applicant.

S. 1219

S. 1219, introduced by Senator Metzenbaum, contains several provisions related to a number of separate issues which in some cases are not at all related to the relicensing of hydroelectric projects under the Federal Power Act, the concise issue under examination in this hearing. The provisions of the bill that do relate to relicensing evidence an apparent bias in favor of municipal applicants to the end that all available sources of hydroelectric capacity subject to relicensing will be taken from existing regulated utility licensees and their customers and given to municipal electric systems.

S. 1219 establishes a municipal preference at relicensing. S. 1219 also creates new standards for evaluation of applications and new licensing conditions for hydroelectric projects applicable only to relicensing of the projects which radically shift the focus of the relicensing decision away from the Section 10(a) standards which have served the public interest in the development and utilization of water resources so well.

Other provisions attached to S. 1219 are entirely unrelated to hydroelectric project relicensing and because of their controversial nature serve only to distract the subcommittee's attention from the central issue. For example, the provision of S. 1219 regarding forced wheeling by electric utility companies directly contradicts the very detailed and specific laws established on that subject by Congress in PURPA just a few years ago. S. 1219 would not affect the wheeling provisions established in Sections 203 and 204 of PURPA which are applicable to all electric utilities, but rather would impose as a license condition new and completely different wheeling requirements for any electric utility that manages to maintain the license for its hydro projects. In addition, S. 1219 burdens the relicensing process, the FERC and all electric utility existing licensees with an incredibly broad antitrust review procedure that has no proper role in hydro relicensing.

I am here today on behalf of Alabama Power Company to support the adoption of S. 426 which we believe is good legislation which will best serve the public interest and consumer interests of the great majority of electric consumers. Naturally, the provision of S. 1219 establishing a preference at relicensing in favor of states and municipalities and against our customers is alone enough to require the Company to oppose that bill. Because of the numerous other unrelated and, I believe, ill-advised provisions of S. 1219, however, I am constrained to provide this subcommittee with information regarding these additional provisions, even though they may not appear to be central to the matter of concern here. For these and other reasons discussed below, Alabama Power Company opposes S. 1219 without qualification.

The Municipal Preference at Relicensing

Section 2(b) of S. 1219 would amend Section 7 of the Federal Power Act to provide for the first time a clearly stated preference for the applications of states or municipalities in the relicensing of hydroelectric projects. Notwithstanding the history of Commission interpretations of Section 7 against the applicability of such a preference at relicensing or the contrasting legal opinions participants in this hearing might offer, it is not important whether S. 1219 does or does not change the law regarding preference at relicensing. This subcommittee is presented with a choice. The issue is which proposal best serves the public interest in the use and development of hydroelectric resource. Is it S. 1219, which is designed to transfer hydroelectric projects at ridiculously low prices from the vast majority of the public who, through regulated electric rates, have in effect paid for these projects to a small privileged section of the public which already possesses and enjoys more than its share of these valuable benefits? We submit it is S. 426, which takes nothing from the already privileged public power interests but does allow for a fair opportunity for an existing licensee to maintain the status quo and protect its customers.

Competition and Diversity

S. 1219 begins with a statement of policy which sets out "fair competition" and "diversity" in such a fashion as to suggest that by mere incantation one can rebuff analysis of the remaining provisions of the bill or the policy statement itself. I support the individual ideas or principles that are identified in the policy statement. I must, however, strongly disagree with any suggestion that the provisions of S. 1219 enhance or protect those principles. In my view, the bill in fact contradicts the notion of fair competition in hydro relicensing and has little to do with competitive relationships within the electric utility industry.

First, the establishment of a municipal preference at the relicensing of hydroelectric projects is a consumer issue, not one of competition between municipal electric systems and regulated utilities. If projects are taken from investor owned utilities by operation of the municipal preference, the costs of such a takeover are imposed directly upon the customers of the utility and the benefits flow to the relatively few customers of the raiding municipality. If existing licensees are given a fair opportunity to maintain the license for their projects, all the benefits retained flow directly to consumers. Because such projects are substantially depreciated, the initial licensee stands to gain a virtually insignificant amount if anything at all in the way of return on the remaining undepreciated investment.

The conclusory policy statement linking the process of hydroelectric project relicensing with the unexplained notion of "diversity" within the electric utility industry strains the actual circumstances too much to be an issue in this legislative matter. The consumer issue of hydro project relicensing is simply not significantly related to the question of competitive relationships within the electric utility industry at large. Moreover, FERC has recently issued a Notice of Inquiry in FERC

Docket No. RM 85-17-000 for the comprehensive investigation of many issues which relate to the wisdom of introducing new and additional competitive aspects to the regulation of electric utility service and practices under Parts II and III of the Federal Power Act. Such issues are very broad and extremely complex. The central question before this subcommittee is relatively narrow and concise. The subcommittee should not allow its attention to be diverted from the central issue of hydroelectric project relicensing by the naked platitude of "diversity."

Second, although the policy declaration of S. 1219 endorses "fair competition in the licensing of hydroelectric projects", the provisions of S. 1219 ensure that the competition at relicensing is heavily slanted in favor of municipal competitors. S. 1219 establishes a statutory preference in favor of municipalities to guarantee a municipal "win" if the competing applications are "equal." While no two proposals for the use of such a facility could possibly be equal in all aspects of beneficial use and integrated management, municipalities have argued in related court proceedings that FERC may not consider such matters in assessing competing applications, thus meaning that a municipal photocopy of an existing licensee's application is "equal" and, therefore, "preferred." What's "fair" about that?

Further, S. 1219 establishes a takeover price for hydroelectric projects subject to relicensing that is ridiculously low compared to the value of the project. The huge financial windfall available to the municipal competitor in the event of takeover encourages a municipal competitor to force a bidding war over ill-advised and uneconomic "improvements" in order to win the new license for a project up for relicensing. Improvements which are not cost justified are a waste of our society's resources. More importantly, every dollar of such a takeover windfall that allows a municipal competitor to propose unjustifiable "improvements" would be provided from the pockets of the customers of the existing licensee who, in effect, paid for the project through their rates. The relicensing process under S. 1219, therefore, would be a very high stakes gamble, but the municipal competitor would be betting only with someone else's money. What's fair about that?

Finally, a variety of provisions in S. 1219 affecting the application process in relicensing further tilt the competition away from a level playing field. S. 1219 would require the existing licensee to make available to competitors any information about the project necessary to file an application. Presumably, any information used to prepare the existing licensee's application would be covered by this provision. In addition, S. 1219 would require the existing licensee to help finance any studies necessary to the competing applicant's case. Importantly, under S. 1219 FERC would be prohibited from considering a competing municipality's lack of experience in operating a hydroelectric facility. This could even be interpreted to prohibit consideration of the comparative benefits available because of the existing licensee's experience with a particular project. These provisions are aimed at making the likelihood of "equal" applications as great as possible so that with a statutory preference municipal electric systems can take over as many hydroelectric projects as possible. What's fair about that?

I believe that S. 1219 does nothing to ensure fair competition in relicensing, but rather attempts to eradicate competition in relicensing altogether by burdening the existing licensee beyond its ability to cope and guaranteeing the outcome of the process before the contest has even begun. Under S. 426, the competition in relicensing would be governed by the time tested principles of Section 10(a) of the Federal Power Act. The applicant with the best proposal wins the contest. This standard of competition will protect the public interest in obtaining the project best adapted for the use and development of the resource and will prevent the imposition of the unfairness inherent in a municipal takeover by operation of a preference at bargain basement prices.

Third, the S. 1219 declaration of policy relates competition in the licensing process to the comprehensive development and utilization of hydroelectric resources. Advocates of the municipal preference coupled with a net investment takeover price argue that projects up for relicensing will not be improved by the existing licensee without the pressure brought upon the relicensing process by a municipal competitor. Under S. 1219, however, municipal competitors would be encouraged to propose project modifications that are not economically feasible or cost justified, knowing that the unjustifiable cost of such proposals can be paid from the financial windfall a winning municipal bidder may take from the customers of the existing licensee. This is an improper allocation of resources and is particularly unfair to the customers of the existing licensee.

Even so, the most important point is that the application requirements, procedures and decision-making standards of the relicensing process under present law and as maintained under S. 426 require FERC to give full consideration to all the proposals and demands of all the competing interests affected by the development and maintenance of a hydroelectric project, including the ideas and proposals of any competing applicants. Because the full presentation and consideration of all competing proposals is required whether or not a competing application is filed, the relicensing process is always competitive.

The Federal Power Act Section 10(a) gives the FERC authority to require modifications at relicensing where necessary to obtain the project best adapted to conserve and utilize the water resources. The FERC staff and various other intervenors analyze and criticize all applications filed with FERC and actively participate in the relicensing process to see that the license application eventually accepted by FERC contains terms and conditions which protect their competing and often conflicting interests. Even without the presence of a competing applicant, this rigorous examination and negotiation process involves many competing groups, such as the federal environmental agencies, the state environmental agencies, the federal fish and wildlife agencies, the state fish and wildlife agencies, the Corps of Engineers, the federal Bureau of Reclamation, the Department of Defense, the Department of Energy, state, county and local health

boards, environmental groups, conservation groups, naturalist groups, fishermen, power boat enthusiasts, sailing enthusiasts, canoeists, upstream riparian residents, downstream riparian residents, upstream recreational interests, downstream recreational interests, upstream flood control interests, downstream flood control interests, industrial interests, agricultural interests and municipal interests. It is not necessary to provide some lucrative financial incentive to municipalities from the innocent customers of existing licensees in order to have an actively competitive relicensing process.

Moreover, the results of this type of competition demonstrate that existing licensees are responding to this type of pressure at relicensing and making improvements to hydroelectric projects during the initial license term or at relicensing when cost/benefit analysis indicates it is prudent to do so. Consider the experience of Alabama Power Company. Under the authorization of nine licenses issued by the FERC and its predecessor, Alabama Power has constructed and presently operates and maintains 14 hydroelectric projects with a total installed generating capacity of 1,582,725 KW. These projects as originally licensed contained installed generating capacity of only 1,098,925 KW. This is nearly a 50% increase in the capacity of our hydroelectric projects since they were originally licensed. Thus, over the years, Alabama Power Company has made significant improvements to its hydroelectric projects. These improvements were initiated and made by Alabama Power Company under the existing laws and FERC procedures pertaining to licensing of hydroelectric projects.

Furthermore, they were made without competition from municipalities or other private utilities.

Some of these improvements were accomplished during the licensing period for the various projects; however, a significant portion of these improvements were made at relicensing. The most recent example of this is our Mitchell Dam, Project No. 82, where the Company is completing redevelopment of the project. The Mitchell Project was initially licensed in 1921 with an installed generating capacity of 52.5 MW. The license was amended in 1948 at the request of the Company to allow installation of an additional 20 MW of generating capacity. The project was relicensed in 1975 with authorization to add 80 MW of generating capacity. Subsequently, Alabama Power Company initiated and completed studies which concluded that it would be more beneficial retire 52.5 MW of generating capacity which had been in service since 1923, retain 20 MW of generating capacity which was added in 1952 and install 150 MW of new generating capacity. Alabama Power Company subsequently requested and received FERC approval to make these improvements to the project. The completion of these modifications will result in a 134% increase in the generating capacity of the project.

Alabama Power Company has improved other hydroelectric projects over the years. At Lay Dam, Project No. 2146, the Company increased the installed generating capacity by 118% in the 1960's. Also, a significant improvement was indirectly accomplished at Jordan Dam, Project No. 618, through development of Walter Bouldin Dam, Project No. 2146, in 1967. The Bouldin

Project utilizes the Jordan Project reservoir through a connecting channel and fully develops the hydraulic head of the Coosa River below Jordan Dam. Development of the Bouldin Project resulted in a 225% increase in capacity, compared to Jordan standing alone.

Alabama Power Company has also made a variety of non-power related improvements to its hydroelectric projects in the areas of water quality, fish and wildlife protection and public recreation. These improvements have resulted in significant public benefits and were also accomplished under the existing laws and FERC procedures pertaining to licensing of hydroelectric projects. As stated previously, the Company pioneered the development and use of turbine aeration devices on hydroelectric generating units which increase the level of dissolved oxygen (DO) contained in turbine discharge waters. This increased DO level provides a dual benefit by enhancing both water quality and fisheries. Presently the Company has such devices installed on 14 of its operating hydroelectric generating units.

Alabama Power Company has generally maintained a policy of opening its lands to the public for recreational use, except where limited by safety or security considerations. In addition, in 1948, Alabama Power established a new recreation development program to encourage public use of the reservoirs created by the Company's dams. This program has been directly responsible for the development of a variety of recreational facilities which provide outstanding water-based recreational opportunities on the more than 168,000 acres of project reservoirs. Such facilities include but are not limited to planned communities, parks, picnic areas, overnight camps, boat launches, hiking and riding trails, and fishing piers. In addition, the Company has made available a considerable portion of its hydroelectric project lands for use as public hunting areas. As of December 31, 1984, the Company has spent more than $840,000 for the development of public recreational facilities and has an annual budget of approximately $229,000 for operation and maintenance of these facilities. The quality and attractiveness of public recreational facilities at the Company's hydroelectric projects is clearly demonstrated by their use, which was estimated to include 4.8 million day visitations and 11.2 million overnight visitations in 1982.

Alabama Power Company has worked diligently to foster the development of fish and wildlife resources at its hydroelectric projects. Such efforts have included close cooperation with appropriate federal and state resource agencies in conducting fishery studies at the Mitchell, Harris, Thurlow, and Walter Bouldin Projects. Several of these studies have resulted in the stocking of certain species to increase the variety of fish available to sportsmen. In the 1950's, the Company designated more than 3,000 acres of its Mitchell Project lands as a game reserve and since that time has cooperated with the State in managing wildlife on these lands. As of December 31, 1984, the Company has spent more than $484,000 for the development of fish and wildlife resources at its hydroelectric projects.

Another environmentally related project improvement involves the use of shoreline control strips or buffer zones on project lands to protect and enhance the scenic and recreational values of the project. Such control strips exist at our Mitchell, Martin, Jordan and Harris Projects. In addition, the control strip around the entire reservoir at the Harris Project serves as a scenic easement to preserve the environmental quality of the shoreline.

These various improvements have been made by Alabama Power Company under the existing structure of relicensing procedures and requirements through consultation and negotiation with the FERC staff and other intervenors, not by the involvement of a competing municipal applicant. Not only is the existing system an effective one for assuring consideration of various interests affected by hydroelectric project relicensing, but the system produces results that lead to the development and maintenance of the project best adapted for service to the public interest in power, navigation, flood control, recreation and sound environmental practices.

The municipal preference and other relicensing provisions of S. 1219 will not yield greater results, but do encourage the wasteful and environmentally dangerous practice of proposing project additions which are not cost justifiable and perhaps not "prudent" in a utility regulation sense as frequently interpreted by state regulatory agencies. The policy statement set out at the beginning of S. 1219, therefore, is a noble gesture but is not supported by the provisions of S. 1219 that follow it. I encourage this subcommittee to examine and analyze the contents of S. 1219 before accepting its stated declaration of purpose at face value. In my view, S. 426 far better serves those principles of the declaration of policy which have some applicability to the concise issue of hydroelectric project relicensing.

New Standards and Conditions Applicable to Relicensing

Sandwiched between the declaration of policy at the beginning of S. 1219 and the antitrust review requirement at the end of the bill are a litany of new standards and conditions which the FERC would have to apply in the relicensing process. In general, these provisions turn the focus at relicensing away from the long range best adapted project goals of Section 10(a). Some of the provisions are entirely unrelated to hydroelectric power. I shall briefly comment on each of these items.

S. 1219 would add new subsections (d), (e), (f) and (g) to Section 7 of the Federal Power Act. As an overlay to all the other specific special interests given priority in the relicensing process as set out in S. 1219, the proposed Section 7(d)(1) would require FERC to make its relicensing decisions "taking into account the need to maintain and enhance diversity within the electric utility industry." As I have pointed out previously, the complex and comprehensive issues of competition and diversity within the electric utility industry generally are not significantly related to the concise and fairly simple consumer issues of hydroelectric project relicensing. More importantly, however, placing such an overall qualification upon the relicensing decision-making process will inevitably lead to municipal claims that "diversity" can only be enhanced by awarding the projects to the smaller competitor in each case. If so, the benefits of hydro projects would be distributed to fewer people as each project came up for relicensing. This provision is contrary to the public interest and would guarantee endless litigation in the future.

Section 10(a) of the Federal Power Act requires that projects be "best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce, for the improvement and utilization of water power development, and for other beneficial public uses, including recreational purposes." The subsection 7(d)(1) proposed in S. 1219 gives lip service to this time-tested standard, but immediately subjugates the Section 10(a) standard to more narrow ideas. S. 1219 would require the FERC to consider, compare, and make findings as to a host of more narrow items which in all respects diminish the priority to be given to "improvement and utilization of water power development." In fact, the proposed subsection lists each portion of the existing Section 10(a) standard along with the more narrow items, except that water power development is not included. "Utilization" is characterized in the proposed subsection as the achievement of "efficiency in the production and consumption of electric power" instead of the comprehensive use of the water resource.

The possibility that the power development purposes of the Federal Power Act would be minimized is further increased by other provisions of S. 1219 which would require the FERC to maximize the protection of fish, wildlife, natural, cultural and recreational resources. Even though the existing relicensing process protects these interests, the command of S. 1219 that their protection be maximized is limited only by the term "practicable." Does "practicable" mean that conditions protecting or mitigating the interests listed in S. 1219 must be imposed until the project will economically fail if one more condition is required? S. 1219 reshuffles Federal Power Act relicensing priorities to the point of raising significant uncertainty as to the power potential that may be available from projects up for relicensing.

The items listed and given priority in S. 1219 may not seem objectionable, however, the preeminent thrust of the Federal Power Act and present national energy policy in favor of the best possible development and utilization of renewable, clean hydropower, may have been lost in the shuffle. The present relicensing process, as developed and defined by agency regulations, policy and case decisions, includes a comprehensive evaluation of most of the items listed in S. 1219. It must be acknowledged that the licensing and relicensing process is a delicate balancing of competing interests. The FERC is the federal agency with the responsibility and expertise to perform this task. S. 1219 would limit the exercise of the agency's discretion and expertise, perhaps tipping the balance against hydropower development. In my judgment, the new relicensing standards proposed in S. 1219 are not in the public interest.

Contrary to the declared interest in a competitive relicensing process, several provisions of S. 1219 directly impact the relicensing process so as to reduce competition between applicants and neutralize the existing licensee's incentive to produce a proposal for a better project.

First, the FERC would be prohibited from considering the municipal applicant's lack of hydro project operating experience or lack of transmission facilities necessary to utilize the power from the project. These two issues are important to a sound relicensing decision. They are uniquely qualified for administrative review and an exercise of discretion by the FERC, which has responsibility for these matters and the expertise to handle them. Furthermore, does S. 1219 mean that FERC may not consider any differences between the applicants that are related to operating experience? Is the good operating record of the existing licensee also prohibited material? Is the FERC prohibited from considering whether the municipal applicant is capable of carrying out whatever grand plans are put forward in order to win the license? At bottom, these provisions of S. 1219 seem designed to assure that the municipal relicensing preference established in the bill operates to take away more projects by removing from the "competition" two areas where municipal applicants probably can't measure up.

Second, S. 1219 requires the existing licensee to make available to any competing applicant "all plans, drawings, designs, data, and any other information relating to the construction and operation of the project." Subject to interpretation, this provision could neutralize the existing licensee's incentive to produce plans for a better project by requiring that such information be shared with the competing municipal applicant. Furthermore, S. 1219 requires the existing licensee to help finance the competing applicant's effort to take away the hydro project up for relicensing by imposing an obligation upon the existing licensee to allow competing applicants to participate in and receive the results of any studies necessary to an application. These provisions clearly operate to restrict competition in the relicensing process by eliminating in advance the aspects of the contest that might show a difference between the competitors. S. 1219 seems designed to increase the likelihood that relicensing decisions would be governed by operation of the municipal preference rather than real competition. With access to a photocopy machine and the municipal preference at relicensing, the municipal applicant would claim "equality" and the new license for the subject hydro project.

S. 1219 also imposes upon the relicensing process several burdens which are entirely unrelated to hydroelectric development or relicensing. One provision authorizes the FERC to require the adoption and implementation of energy conservation programs for the utility and its customers. These matters, as important as they are in dealing with retail customers, have no relationship to the applicant's plans for the development and use of an existing hydroelectric project which is up for relicensing.

Alabama Power Company has a good conservation record. The Company has sponsored programs for many years to promote greater energy efficiency in home construction, including increased insulation and weather stripping, proper sizing of heating and air conditioning equipment, and the installation of heating, water heating, air conditioning and other types of electric equipment and appliances with high energy efficiency ratings. We have sponsored similar programs to promote improvements in energy efficiency of older homes. Alabama Power has also sponsored programs to promote energy efficiency for agricultural, commercial and industrial consumers. Similar programs, varying from state to state because of differences in climate and other factors, are sponsored by most other regulated utilities.

In addition to direct conservation programs, Alabama Power promotes energy efficiency through its electric rates. Rates are designed to track costs to the maximum extent practicable. This encourages conservation and efficiency by giving consumers correct price signals regarding the costs involved in supplying electricity. We eliminated declining block rates for residential usage in 1976. Seasonal rate differentials have been incorporated in our rate design since 1972. Under these seasonal rate differentials residential consumers pay a higher price per kwh during the summer months when demands on our system are the greatest. This encourages consumers to conserve, particularly during the system peaks, thus reducing the need to construct additional generating capacity. Alabama Power also has worked with its industrial customers over the years regarding such matters as interruptible rates and cogeneration.

I believe that energy conservation is important to both electric consumers and electric utilities. However, the provisions of S. 1219 relating to conservation have no place in the hydro relicensing process. Relicensing proceedings are complicated, lengthy and costly enough without the imposition of this additional burden.

Furthermore, this is an issue comprehensively dealt with in PURPA just a few years ago. Conservation policies and programs, as they are referred to in PURPA, are subject to the administration of state regulatory agencies. The original version of the National Energy Act, of which PURPA is a part, would have required federal agencies to administer conservation programs and regulations. After much debate and consideration, Congress in adopting PURPA concluded that these matters were best left to the jurisdiction of the state regulatory agencies.

Since PURPA was adopted there has been an enormous amount of regulatory activity dealing with consumption efficiency criteria. The activity and the resulting regulations have varied significantly from state to state, as Congress envisioned it might. Because of differences in demands, load shapes, generation mix, availability of fuel and regulatory policies, programs which might be needed in one region of the nation might have little benefit in another region and could, perhaps, be counterproductive. As indicated already, these matters are greatly effected by climatic conditions and other conditions indigenous to particular sections of the country.

In Alabama, there has been a long series of proceedings dealing with the PURPA criteria. The proceedings have been complex, time consuming and costly. I believe that Congress would make a grave mistake to engraft an evaluation of such practices into the proceedings for the relicensing of hydroelectric projects. Requiring FERC to evaluate an application for the relicensing of each hydro project in terms of these PURPA matters would have the effect of getting through the back door what Congress rejected when it adopted PURPA in 1978.

S. 1219 also requires the FERC to include a mandatory wheeling obligation as a condition of each new license issued in the relicensing process. This is a point I have discussed earlier and I will not belabor here, but, like the conservation and diversity issues raised in S. 1219, the wheeling provision is highly controversial and complex. It has no place as an "add-on" to legislation dealing with hydroelectric relicensing. Congress has previously dealt with the issue in PURPA and the FERC is presently opening a wide sweeping examination of transmission access and other issues in the context of a comprehensive rulemaking. The subcommittee should not entangle the concise consumer issue of hydro relicensing in the complex question of wheeling.

Section 4 of S. 1219 requires the FERC to complete the relicensing process and issue new licenses not later than one year prior to the expiration of the existing license. Standing alone, it seems this provision would serve to press the FERC for efficient handling of license applications. Considering the unavoidable backlog of cases that the other burdensome provisions of S. 1219 would create, it seems obvious that the FERC cannot possibly comply. At this point, I am reminded of the observation of Judge Mikva in the City of Dothan case cited earlier in my testimony. When pressed, the agency and its staff will have a tendency to lean on the perceived Congressional preference for municipal applicants and allow cases to be disposed of by operation of the municipal preference established in the bill.

Lastly, I must comment on Section 3 of S. 1219. It is said to provide for the possibility of some limited mitigation of the economic impact upon the customers of an existing licensee upon takeover of a project. To be short, the provision is an empty promise. It is limited by so many qualifications, quantifications and contingencies that even a casual reading of the section demonstrates its meaninglessness. Even if the underlying notion were firmed up with clear unqualified language, the provision does not begin to adequately compensate the consumers served by the existing licensee.

The Relicensing Antitrust Provision

Section 5 of S. 1219 would add to the Federal Power Act a new Section 15A which would require the FERC to conduct an extremely burdensome and expensive antitrust review of any application for a new license under the relicensing provisions of Section 15. This review would not concisely focus upon facts or circumstances indicating a violation of the antitrust laws by the existing licensee during the initial license term. Nor would the scope of the review be restrained even to seeking out activities that create or maintain an inconsistency with the antitrust laws. The antitrust review required under S. 1219 is still broader than all these. The bill states: "... the Commission shall not issue a license where it finds that the activities under such license would tend to create or maintain a situation inconsistent with the antitrust laws ..." (emphasis added).

I find it ironic that this new standard of antitrust culpability is offered to Congress on behalf of municipalities which as a group argued to the 98th Congress that the antitrust laws themselves (not just the principles underlying the antitrust laws or concepts "inconsistent" therewith) are vague, difficult and expensive to comply with, punitive in nature and lead to the imposition of inequitable consequences upon innocent taxpayers. Hearings on H.R. 6027, House Committee on the Judiciary, Rep. No. 98-965, 98th Congress, 2d Session, p. 11 *et seq*. The Congress was persuaded and enacted the Local Government Antitrust Act of 1984 completely absolving municipalities from any financial responsibility even for actual violations of the antitrust laws. Municipalities are now telling Congress that their competitors for hydroelectric projects ought to be subject to standards of antitrust review much more onerous than the actual violation standards from which they themselves so recently have received financial immunity.

My comments regarding the antitrust review provisions of S. 1219 are focused on two topics: (1) The impropriety of imposing an antitrust review of this type upon the process of relicensing a hydro project, and (2) the burden such a requirement will impose upon the FERC, the parties, the taxpayers and consumers. Based upon my experience in hydroelectric project development, licensing and operation and also my experience in an antitrust review conducted in relation to the Company's operating license for its nuclear plant, I am firmly convinced that imposition of such a tremendous burden upon FERC and the hydro relicensing process would be legally unjustifiable and an incredibly harmful and expensive mistake for which the taxpayers and electricity consumers would pay.

A Relicensing Antitrust Review Is Not Justified

Requiring an antitrust review prior to a licensing decision or other federal action is an extraordinary measure. Congress has made pre-action antitrust review a formal part of evaluating federal licenses or approvals in only a few instances. The provision of S. 1219 which requires an antitrust review of every application for relicensing of a hydro project is supported by a claim that such a review will "promote competition", and "achieve fairness." Before accepting these platitudes, Congress should assess the history and circumstances of other mandatory pre-action antitrust reviews and evaluate whether hydroelectric project relicensing is a proper instance for the imposition of this most extraordinary requirement.

Congress first required a pre-action antitrust review in the Federal Property and Administrative Services Act (40 U.S.C. § 471 _et seq._), adopted shortly after World War II. That Act authorized federal agencies to dispose of surplus government property, but required the disposing agency to consider any anticompetitive aspects of such disposal before selling the government-owned property. Congress wanted assurance that property acquired for the war effort but no longer needed would not be disposed of in a manner which could be predicted to result in antitrust problems.

Other statutes in which Congress has required an antitrust review include:

1. The Outer Continental Shelf Lands Act, 43 U.S.C. § 1331 et seq., which requires an antitrust review prior to the award of oil and gas leases on Outer Continental Shelf property belonging to the United States.

2. The Northeast Rail Services Act, 45 U.S.C. § 1101 et seq., requires an antitrust review prior to sale by the United States of the common stock of the corporation created to acquire financially troubled railroads.

3. The Naval Petroleum Reserves Production Act, 10 U.S.C. § 7420 et seq., provides for an antitrust review prior to sale by the Secretary of the Navy of oil produced from the Naval Petroleum Reserves.

4. The Deep Sea Bed Hard Mineral Resources Act, 30 U.S.C. § 1401 et seq., provides for government regulation of mineral extraction from deep sea bed areas. The Act contemplates the future development of international treaties governing this subject and requires an antitrust review prior to issuance by the United States of a license to recover minerals from these areas.

5. The Mineral Leasing Act, 30 U.S.C. § 181 et seq., requires an antitrust review before the leasing of federal lands to private enterprise for oil, gas and mineral exploration.

6. The National Aeronautics and Space Administration Authorization Act, 35 U.S.C. § 200 et seq., requires an antitrust review prior to licensing inventions owned by the United States to private entities.

7. The Atomic Energy Act of 1954, as amended, 42 U.S.C. § 20 et seq., requires a pre-construction antitrust review in connection with any application for a permit to build a nuclear production or utilization facility.

In each of these instances where Congress has required pre-action antitrust reviews, the subject government action involved proprietary interests of the federal government or authorizations by the federal government for a private entity's use of government owned or developed technology. The one arguable exception, the Deep Sea Bed Hard Mineral Resources Act, involves licensing for mineral extraction in areas subject to international control and although not owned by the United States government, the licensee cannot obtain mining authorization from any other owner or source of authority.

The most notable example of a pre-action antitrust review is Section 105c of the Atomic Energy Act of 1954. Apparently, S. 1219 is modeled after this example. Since the initial Atomic Energy Act in 1946, the Nuclear Regulatory Commission (NRC), or its predecessor, the Atomic Energy Commission, has been required to consider the antitrust implications associated with turning over technology developed and owned by the federal government to private entities. In 1954, the revised Atomic Energy Act authorized the Commission to grant licenses to private entities for atomic energy production and utilization facilities. Licenses were to be either for research or commercial purposes. Congress required the Commission to conduct an antitrust review before issuing any commercial licenses which would permit private entities to use atomic energy technology developed by the federal government for commercial purposes. The review was designed to predict whether the issuance of a license for the use of the federally developed technology "would tend to create or maintain a situation inconsistent with the antitrust laws."

The Atomic Energy Commission issued no commercial licenses between 1954 and 1970 and the antitrust review process was never invoked. In 1970, Congress amended the Atomic Energy Act of 1954 to accelerate the conduct of pre-licensing antitrust reviews in connection with the licensing of nuclear power reactors used for production of electricity. The amendment narrowed slightly the antitrust review standard by striking out the obscure words "tend to" so that the test became "... whether the activities under the license would create or maintain a situation inconsistent with the antitrust laws...". 42 U.S.C. § 2135(c)(5).

The only appellate court case dealing with the Atomic Energy Act pre-licensing antitrust review is Alabama Power Co. v. Nuclear Regulatory Comm'n, 692 F.2d 1362 (11th Cir. 1982). Even considering the narrowing of the standard by the 1970 amendment, the court of appeals found that the antitrust review was intended to be broad and not limited to adherence to traditional antitrust review standards. With regard to the legal and policy justification for such a broad and burdensome review requirement, the court stated:

> When the Atomic Energy Act was passed in 1954 it allowed private entry into the nuclear field for the first time. In the preceding years, scientific and technological nuclear know-how had been held exclusively by the government. This bank of information had been compiled over the years from research and development which had been financed by the American public. In turning this publically held wealth of knowledge and scientific progress over to private enterprise, Congress felt that strict restraints should be included to prevent unfair advantage for those with great resources.

692 F.2d 1369.

Congressional concern over disposal of publically held technology or assets has been present in all of the instances to date in which pre-licensing antitrust reviews have been required. In stark contrast, hydroelectric projects are not federal property available for disposal at the expiration of the initial licenses. Likewise, in contrast to the Atomic Energy Act, the technology of hydroelectric power was developed by private investment and research. As I have set out in detail in an attachment to this testimony, a concern for disposal of federal proprietary interest or federally owned or developed technology is not present in connection with the federal decision regarding to whom an existing hydroelectric project should be relicensed. Congress has no reason to require an antitrust review in the relicensing process.

The prior statutory antitrust reviews are also commonly characterized by a second policy justification. Each of the other antitrust reviews required by Congress was designed to predict whether the government authorization for commercial use of the referenced federal proprietary interests or federally developed technology would lead to results inconsistent with the antitrust laws. This was necessary because the government had no prior history of the licensee's use of the licensed activity or item upon which to rely in making its authorization decision.

The best example is the Atomic Energy Act. The standard to be employed in the pre-licensing antitrust review for commercial licenses under the Atomic Energy Act was explained in the Report of the Joint Committee on Atomic Energy which accompanied the 1970 amendment.

> [T]he concept of certainty of contravention of the antitrust laws or the policies clearly underlying these laws is not intended to be implicit in this standard; nor is mere possibility of inconsistency. It is intended that the finding be based on reasonable probability of contravention of the antitrust laws or the policies clearly underlying those laws. It is intended that, in effect, the Commission will conclude whether, in its judgment, it is reasonably probable that the activities under the license would, when the license is issued or thereafter, be inconsistent with any of the antitrust laws or the policies clearly underlying these laws.

The Joint Committee on Atomic Energy's Report, H.R. Rep. No. 91-1470, 91st Cong., 2nd Sess. at 14 (1970) (emphasis added).

Congress had many questions regarding the impact commercial use of this new technology would have upon the electric utility industry. It is clear that Congress intended for the Atomic Energy Commission to predict what the licensee would do with this new technology and to predict whether the licensed activity would produce results that would be inconsistent with the antitrust laws. The Eleventh Circuit confirmed this Congressional intent in its interpretation of the antitrust review standard in the Alabama Power case, stating:

> Before issuing a license it is impossible to predict with absolute certainty that activities under the license will create an anticompetitive situation. For this reason, Congress did not intend that NRC limit its concerns to activities which are mature violations of the antitrust laws.

692 F.2d 1368. Because the prelicensing review employed a predictive standard, the traditional approach to antitrust laws developed in the courts and the traditional antitrust enforcement scheme was to be replaced with a "wider" scheme.

In hydroelectric relicensing matters, the government has a detailed and documented 50 year history of the existing licensee's use of the very item which would be the subject of an antitrust review required by S. 1219. Any anticompetitive use of the project by the existing licensee over the initial license term has been subject to identification and prosecution prior to the government's decision regarding relicensing. The government has no need to attempt to predict what an existing licensee might do with a relicensed hydro project. An antitrust review prior to relicensing of a hydro project would serve no purpose. It would, however, complicate and burden the relicensing process. It is clear, therefore, that none of the facts or circumstances which justified an antitrust review in other statutory schemes are present in the hydro relicensing process. Considering the extraordinary nature of such a measure, this alone should result in this Committee's rejection of the review provision of S. 1219.

A Relicensing Antitrust Review Would Impose Tremendous Burdens

The most critical reason for rejecting the antitrust review provision of S. 1219, however, is a realistic assessment of the impact of such a requirement upon the relicensing process. I believe it would be instructive to the subcommittee if I briefly commented upon the burdensome and costly experience of Alabama Power Company with the antitrust review provisions contained in the Atomic Energy Act, as amended in 1970. I don't believe that Congress will deem it wise legislative policy to impose upon the hydro relicensing process an unnecessary and wasteful antitrust review such as that experienced at the Atomic Energy Commission.

Alabama Power Company initiated its effort to obtain a license for its only nuclear power plant in 1969, prior to the 1970 amendment of the Atomic Energy Act. Congress recognized that certain applications for construction permits, such as Alabama Power's, were already on file and provided in the 1970 amendment that construction of such projects could proceed without completion of the antitrust review proposed by the amendment. The amendment provided that conditions determined necessary by the Commission in the antitrust review could be imposed in the operating licenses to be issued after construction of such plants were completed. Alabama Power Company was grandfathered for purposes of the construction license and was able to endure the antitrust review required under Section 105c of the Atomic Energy Act during the long construction period.

The importance of this distinction is clear when it is recognized that the antitrust review administered by NRC under the 1970 amendment required a long period of time to complete and involved a tremendous administrative and legal proceeding. The proceeding imposed upon the Company began with the advice letter from the Department of Justice issued in August, 1971, calling for an antitrust review. The antitrust review was directed by the NRC in June, 1972. During the period from September, 1972 until December, 1974, the parties, including the Department of Justice, Alabama Electric Cooperative, Inc. (AEC), a group of municipal electric power distributors and the staff of NRC were engaged with an Atomic Safety and Licensing Board to frame the complex issues, undertook a burdensome discovery effort and were involved with testimony preparation. The prepared testimony filed by the several parties exceeded 1500 pages. Filed testimony was accompanied by hundreds of documentary exhibits reflecting many aspects of the Company's history, including corporate developments over the Company's sixty year history, the Alabama Public Service Commission proceedings during a span of fifty years, Securities and Exchange Commission proceedings, including those relating to the break up of certain holding companies under the Public Utility Holding Company Act of 1935 and Federal Power Commission proceedings regarding rate filings and diverse other matters regulated by that Commission. In addition, documents were placed in evidence reflecting decades of contract negotiations between the Company and its wholesale customers. The "broad inquiry" required under the antitrust review provisions also embraced appearances by me and my predecessors before various committees of Congress.

The evidentiary proceeding involved more than 30 witnesses whose examination and cross-examination resulted in transcripts of more than 28,000 pages and consumed over 140 trial days. The record on the first phase was closed in April of 1976. Thereafter briefs were filed and the hearing board entered into the initial decisional process which was not completed until the summer of 1977. The evidentiary proceeding involved 3 or more lawyers from the Department of Justice, several from the staff of the Nuclear Regulatory Commission, several lawyers for the participating intervenors and 3 or more lawyers on a full time basis representing the interests of the Company. These proceedings involved inquiry into almost every aspect of the development and operation of Alabama Power Company from the time it commenced operations up to and including rate and other regulatory proceedings taking place during the antitrust review.

The broad inquiry experienced in the Alabama Power Company antitrust proceedings involved an investigation of the early development of hydro resources in the State of Alabama during the period 1912 to the current period. It was alleged that the Company's development of these facilities was monopolistic. The review involved allegations that the acquisitions and mergers engaged in by the Company throughout its more than sixty years of corporate history, including the corporate changes resulting from the implementation of the Public Utility Holding Company Act of 1935, were monopolistic. This broad inquiry involved a review of the construction and operation by the Company of its approximately 6,000 or 7,000 miles of transmission lines which were constructed in obedience to the Company's legal obligation to serve the public. It was alleged that the use of such facilities for its customers was anticompetitive. The antitrust review involved the assertion that the Company's development of its extensive distribution properties, also required to fulfill the Company's duty to serve, created a situation of monopoly power and that desires to continue providing power to its customers reflected an intent to monopolize.

The proceeding before the NRC involved a review of the earlier action of this Congress in considering and passing legislation during the early 1950's to confer jurisdiction upon the Federal Power Commission to license additional hydroelectric projects on the Coosa and Tallapoosa Rivers in Alabama on stretches of those rivers which had previously been preempted for development by the federal government by the River and Harbor Act of 1945. The proceeding involved an inquiry into the rate practices of the Company before the Alabama Public Service Commission and the Federal Power Commission over several decades. It involved a review of negotiations and contract developments between the Company, its wholesale municipal customers and its wholesale cooperative customers, including dealings over a period of 30 to 40 years with the cooperatives and the Rural Electrification Administration involving the Company's wholesale power supply arrangements with the electric cooperative borrowers from REA. This proceeding also involved the history of the Company's dealings with Southeastern Power Administration (SEPA) and the municipalities and electric cooperatives to which SEPA undertook to market power as preference customers under the Flood Control Act of 1944.

A review of the record in that "broad inquiry" before NRC will show that almost every aspect of the corporate, physical, regulatory and marketing phases of Alabama Power Company's history were made the subject matter of review and found the basis of dozens of allegations of misconduct. Nevertheless, the scope of the review conducted by the NRC under the language of the Atomic Energy Act is not as broad as the review specifically envisioned for the FERC by S. 1219. The language of S. 1219 would require the FERC to go beyond the examination conducted by the NRC so as to predict and prevent activities which would even "tend to" create or maintain a situation inconsistent with the antitrust laws.

The enormous and burdensome evidentiary proceeding before the Hearing Board at the NRC involving a broad inquiry into literally dozens of "alleged anticompetitive activities" resulted in a determination that Alabama Power Company during its sixty or more years of corporate history had engaged in five instances of conduct which the Hearing Board thought were "anticompetitive." Even though the Hearing Board expressly found that several of these five instances were not accompanied by any intent to monopolize and were not characterized by anticompetitive intent, it, nevertheless, found that the instances had an anticompetitive effect. The Hearing Board faulted the Company for entering into 5 year electric power supply contracts with municipalities or electric cooperative distributors, even though undisputed evidence of record demonstrated that reasonable term all-requirements contracts were the norm in the electric utility business and that such provisions served mutual legitimate business interest of the purchaser and the seller. These contracts were deemed anticompetitive under the vague standard of "inconsistent with the antitrust laws" even though it is clear that REA policy required the same cooperatives to enter into 35 year all-requirements contracts with AEC. Likewise, the evidence showed that it was the general practice for TVA to enter into 20 year all-requirements contracts with its municipal and cooperative distributors.

Other Alabama Power Company conduct condemned as anticompetitive was subject to regulation by either the Alabama Public Service Commission or the Federal Power Commission. The fact that such regulation impacted upon a determination as to whether the Company possessed monopoly power or whether its conduct should be characterized as responsive to regulatory policy was deemed irrelevant by the Hearing Board.

The Hearing Board determined that the 5 instances of anticompetitive conduct justified conditioning the operating license for the Farley Nuclear Plant to require the Company to sell unit power from the plant to AEC, its competitor, at a price reflecting the Company's costs in the Farley Plant as determined in accordance with cost methodology applied by the Federal Power Commission (now FERC) under the Federal Power Act. The license conditions also required the Company to provide to AEC transmission services and supplemental power required by AEC to serve its load when the Farley Plant was not in operation. These conditions were substantially equivalent to offers made by the Company to AEC prior to the commencement of the antitrust review proceedings.

It was the view of the Company that the facts found in the review proceedings did not justify conditioning the license for the operation of the Farley Plant. The municipal intervenors in that proceeding were not afforded any relief by the NRC Hearing Board. AEC had contended that the relief provided was inadequate because it failed to require the Company to sell part ownership in the nuclear plant. Such a sale would have enabled the cooperative to utilize its opportunity to borrow funds through REA and to enjoy the tax subsidies that could be applied to its ownership of the Farley Nuclear Plant. Even though unit power sales would have given the cooperative power cost equal to Alabama Power, it wanted more. As a consequence, all parties, including the Department of Justice, appealed to an Atomic Safety and Licensing Appeal Board (Appeal Board) delegated by NRC to review the initial decision of the Hearing Board. That appeal required briefing and oral argument by all parties. After considering the matter for approximately four years, the Appeal Board issued an order on June 30, 1981, modifying the order of the Hearing Board and requiring the Company to offer to AEC part ownership in the Farley Plant. Furthermore, the Appeal Board required the Company to provide transmission services to AEC and the municipal distributors.

In overruling the Order of the Hearing Board and reversing its findings in several significant respects, the Appeal Board ruled on the basis of its review of the record that, in addition to the five instances of anticompetitive conduct found by the Hearing Board, the Company had engaged in two more courses of conduct the Appeal Board deemed to be anticompetitive.

The first such course of conduct was the Company's reduction of its wholesale power rates to electric cooperatives in 1941, 1946 and 1950. Even though the evidence was clear that such reductions were (a) encouraged by REA, (b) requested by the respective customers, (c) consistent with Alabama Power's cost of power experience, (d) requested and approved by the Alabama Public Service Commission which then exercised jurisdiction over rates to wholesale distributors, and (e) influenced REA not to make loans to AEC to finance the construction of duplicating generation and transmission facilities, the Appeal Board found such rate reductions to be anticompetitive because the effect was to "forestall" the cooperative from installing its own generating capacity. To my amazement, this determination was made even though it was the announced policy of REA to seek reduced wholesale rates before issuing REA loans to build generating plants.

The second course of conduct found improper by the Appeal Board was the failure of Alabama Power to offer to AEC the opportunity to purchase and own a part interest in the nuclear plant. The Appeal Board held that only by joint ownership would AEC be able to use its REA borrowing ability and its tax immunities to strengthen its competitive position with Alabama Power.

Alabama Power Company attempted to obtain NRC review of the order of the Appeal Board, but NRC declined to review the record and order in the proceeding. The Company then appealed to the

Eleventh Circuit Court of Appeals. The Company presented the Court with a number of legal issues involving the application of traditional antitrust principles which it contended should determine whether the Company had engaged in conduct inconsistent with the antitrust laws. The Eleventh Circuit refused to consider the authorities and arguments put forth by the Company concluding that since "antitrust violations" were not involved in the NRC review under the language of the 1970 amendment of the Atomic Energy Act, NRC or its designated boards were free to make their own determination as to whether conduct of the Company was merely anticompetitive, and thus inconsistent with the antitrust laws, without regard to the application of traditional antitrust principles. The Court rejected the Company's contention that principles established by the federal courts and the Federal Trade Commission in the application of the federal antitrust laws should be adhered to in evaluating any alleged antitrust inconsistencies in the conduct of Alabama Power Company.The Court left the NRC free to develop its own rules and guidelines as to whether any particular conduct or situation is inconsistent with antitrust laws without reference to established antitrust precedents and principles.

An effort was made by the Company to obtain review by Petition for Certiorari to the United States Supreme Court. However, the Supreme Court, which reviews approximately one out of twenty cases presented to it, declined review. The NRC, therefore, was left with practically unfettered discretion as to how it shall apply antitrust review provisions under the Atomic Energy Act.

While there may be some basis for the Eleventh Circuit's view that the Atomic Energy Act left the NRC with broad discretion in the conduct of its antitrust review of applicants for a nuclear license, it is poor policy indeed for Congress to delegate to its administrative agencies authority to conduct antitrust reviews without regard to legislative standards or adherence to the actual antitrust laws. Today we are dealing with Congressional policy and not a court's interpretation of a loose statute previously enacted by Congress.

The standard for antitrust review under S. 1219 is even less definitive than that included in the Atomic Energy Act. The NRC has never explained what principles do apply in the antitrust review if traditional principles of antitrust review do not apply. Such legislative policy is altogether unsatisfactory even as it relates to the initial licensing of nuclear generating facilities of huge scale involving the utilization of basic technology developed primarily by the federal government. To take the same type of review and impose it on the relicensing of the hydroelectric projects developed by Alabama Power Company with private resources and dedicated to the public use is simply incredible. Owners of hydro projects due for relicensing would have no choice but to endure the entire burdensome, expensive hearing process entailed in such a review or simply surrender their projects to the attacking municipal applicant. Unlike the Atomic Energy Act example, there would be no opportunity to avoid the lengthy proceedings by opting for a non-nuclear source of new generation. Considering the number of existing projects due for relicensing, the FERC would be inextricably overcome by the sheer massiveness of the antitrust review task.

It must be recognized that the adoption of S. 1219 would impose a literally crushing burden upon the process of relicensing hydro projects under the Federal Power Act. The bill could result in total frustration of the often-stated desire of Congress to further development of the renewable power generation resources available from hydro power. For example, in those cases where one or more applicants propose to enlarge the generating capacity of an existing hydro project, the construction delay caused by the antitrust review could be up to a decade or more. No applicant would be in position to proceed with the design, purchase and construction of new generating facilities or the improvement of other project works until the license matter has been concluded at FERC, including court review. Rather than promoting the development of hydro resources, the antitrust review must be deemed a hobbling measure altogether contrary to the public interest.

The matter of extending the antitrust review provided for under the Atomic Energy Act to other sources of electric power production has already been proposed to Congress and rejected. The H.R. 8444 version of The National Energy Act as it was considered on the floor of the House would have required all investor-owned public utilities, such as Alabama Power, to undergo an elaborate "antitrust" review similar to that required by Section 105c of the Atomic Energy Act before it could proceed with the construction of any new non-nuclear generating units or any transmission line forming a part of the utilities' bulk power supply system. On August 8, 1977, a vote to eliminate the antitrust review proposal carried by a vote of 257 to 160.

Near the end of the Carter administration, the Department of Energy entered into a contract with Transcomm, Inc., of Falls Church, Virginia (Contract No. DE-AC01-79PE-70025) commissioning Transcomm to study the experience of the NRC with the antitrust review required by Section 105c of the Atomic Energy Act. In June 1981, Transcomm submitted to the Department of Energy a draft report of its study. Transcomm met with numerous individuals from a segment of the electric utilities and had telephone discussions with countless others. Its investigation included discussions with the antitrust staff of the NRC, the Department of Justice, the American Public Power Association and its members, the National Rural Electric Cooperative Association and its members. The contractor concluded from its study that the experience of the NRC's antitrust review does not provide "... a rationale for extending the process to include fossil fired baseload units." In addition, the contractor concluded "... that a prelicensing or anticipatory review of the type which has been practiced [at NRC] does not really provide an appropriate forum in which to address antitrust issues -- because it is not generally possible to conclude the investigations and concommitant hearings and at the same time insure that capacity will be added on schedule."

The contractor also concluded that "[t]he prelicensing format in effect forces concessions from the applicant utilities, without a full debate on the merits of antitrust issues which may be relevant."

The draft reports from Transcomm are available from the Office of Competition of the Department of Energy and may be obtained upon request to Mr. Milton Jordan, Director of Freedom of Information, U. S. Department of Energy, Forrestal Building, Washington, D.C., 20585. It is my understanding that the draft document is considered by the Department of Energy as an historical analysis of the NRC review process but that DOE determined not to proceed any further with the study.

While this independent study produced no further action on the part of DOE, I believe it points up the problems inherent in an antitrust review requirement such as that prescribed in the Atomic Energy Act and called for by S. 1219.

In summary, I believe that the antitrust review provisions of S. 1219 are extremely unwise as a matter of policy and practical reality. First, the legal or policy justifications for other applications of an antitrust review provision, namely the use or disposal of federal property or technology and the need for some prediction of the potential impact of that use or disposal upon competition, are simply not present in the facts, circumstances and policy concerns related to the relicensing of hydroelectric projects. Second, an antitrust review of an electric utility company is a massive undertaking which, under the terms of S. 1219, would have to be performed in every instance where an existing electric utility licensee sought to relicense its hydro project. In addition to the huge waste of time and resources of all parties, including the intervenors and the FERC, the sheer volume of the task would literally flood the relicensing process and quite possibly bring the prospect of further development of additional hydro capacity at existing projects to a quick stop. This Committee should reject S. 1219.

Conclusion

I appreciate this subcommittee's attention to this issue which is extremely important to the customers of Alabama Power Company and the vast majority of electricity consumers throughout America. Thank you for this opportunity and your consideration of this testimony.

Alabama Power Company
Data Relating to
Hydro Electric Facilities
As of December 31, 1984

	Plant	Expiration Date of License	Net KWH Generation 1984	Nameplate Capacity (Killowatts)	Total Plant Investment 12-31-84(1)	Accumulated Depreciation 12-31-84 (1)	Net Book Value 12-31-84(1)	1985 Fossil Replacement Capacity Cost(1)(2)	Net Book Value at License Expiration(1)	Fossil Replacement Capacity Cost at Expiration Date(1)(2)(3)
T	Yates	12-31-1993	159,081,000	32,000	$ 5,680,937	$ 3,252,068	$ 2,428,869	$ 53,374,000	$ 1,639,198	$ 98,792,000
T	Thurlow	12-31-1993	278,826,000	58,000	8,106,853	3,905,695	4,201,158	108,545,000	3,179,992	200,909,000
C	Mitchell	07-30-2007	408,990,000	72,500	9,665,617	5,448,073	4,217,544	268,170,000	138,282,762(4)	1,411,908,000
C	Jordan	07-31-2007	192,254,000	100,000	12,895,700	6,716,303	6,179,397	229,860,000	1,696,087	1,210,206,000
C	Weiss	08-01-2007	280,339,000	87,750	39,701,493	10,025,137	29,676,356	128,977,000	16,328,516	679,060,000
C	Henry	08-01-2007	250,909,000	72,900	32,166,841	6,721,411	25,445,430	118,761,000	14,005,741	625,273,000
C	Bouldin	08-01-2007	1,053,487,000	225,000	61,787,339	8,581,974	53,205,365	383,100,000	31,796,527	2,017,011,000
C	Logan Martin	08-01-2007	467,097,000	128,250	67,173,386	12,167,309	55,006,077	229,860,000	29,976,474	1,210,206,000
C	Lay	08-01-2007	735,193,000	177,000	38,315,347	10,025,333	28,290,014	298,818,000	12,484,564	1,573,268,000
W	Smith	09-01-2007	296,477,000	157,500	33,720,826	9,310,771	24,410,055	305,203,000	12,373,154	1,617,224,000
W	Bankhead	09-01-2007	175,779,000	45,125	9,450,370	2,962,373	6,487,997	83,005,000	3,503,190	439,831,000
T	Martin	06-08-2013	434,506,000	154,200	19,437,704	10,803,134	8,634,570	265,616,000	919,593	2,190,898,000
W	Holt	09-01-2015	174,800,000	40,000	10,146,577	2,407,120	7,739,457	71,512,000	3,393,719	701,375,000
T	Harris	12-27-2023	188,853,000	135,000	225,711,125	4,990,108	220,721,017	222,198,000	94,172,940	4,138,499,000
	Total		5,096,591,000	1,485,225	$573,960,115	$97,316,809	$476,643,306	$2,766,999,000	$363,752,457	$18,114,460,000

C	Coosa River
T	Tallapoosa River
W	Warrior River

(1) Includes transmission substation.
(2) Includes transmission costs associated with replacement capacity. Mitchell value includes replacement costs for Mitchell Dam after redevelopment in 1985.
(3) 8% escalation utilized based on 1984 Budget Menu Costs For Generation Construction Expenditures (SCSI).
(4) Includes investment associated with the 1985 Mitchell Dam Redevelopment.

ed/90/4

THE FEDERAL GOVERNMENT'S INTEREST IN HYDROELECTRIC PROJECTS LICENSED UNDER THE FEDERAL POWER ACT IS PURELY REGULATORY, NOT PROPRIETARY

Section 4(e) of the Federal Power Act describes the legal basis for the Commission's licensing authority with respect to hydro projects. The language of this enabling provision demonstrates that Congress clearly recognized that the basic federal interest in hydro projects is a purely regulatory interest based upon Congress' power under the Commerce Clause to regulate navigable streams except where public lands or Indian reservations are involved. The section states:

> Sec. 4. The Commission is hereby authorized and empowered --
>
> (e) To issue licenses ... for the purpose of constructing, operating and maintaining dams, water conduits, reservoirs, power houses, transmission lines or other project works necessary or convenient for the development and improvement of navigation and for the development, transmission and utilization of power across, along, from or in any of the streams or other bodies of water over which Congress has jurisdiction under its authority to regulate commerce with foreign nations and among the several States, or upon any part of the public lands and reservations of the United States....

Likewise, in Section 4(g), the Commission's authority to investigate possible encroachments upon its licensing authority and to issue and enforce remedial orders is based upon and restricted to the same regulatory interest, except as affecting public lands and reservations. Where public proprietary interests belonging to the federal government are involved in a hydro project, Congress provided in Section 10(e) for appropriate charges to be assessed for their use. Other examples of the Congress' understanding of its role as regulator, but not owner, of the navigable waters throughout the nation are apparent in Section 9(b) regarding an applicant's demonstration of compliance with state property, water and utility laws, Section 23(b) regarding the Commission's licensing authority over sites on non-navigable waters and Section 27 clarifying continuing primacy of state water law regarding rights in and uses of flowing waters. The Federal Power Act itself, therefore, evidences Congress' acknowledgement that the federal government has no proprietary interest whatsoever in hydroelectric projects not built on federal lands or reservations or superimposed on existing federal dams even though they utilize the flow of navigable waters. The enabling legislation makes clear that the federal interest is strictly regulatory.

Notwithstanding the language of the Act, proponents of the so-called "public domain" argument assert dogmatically that the admittedly dominant regulatory power of Congress over navigable waters somehow transforms the private assets involved in a licensed project into public assets allegedly due to be returned to public ownership at time of relicensing. Regardless of the unquestioned predominance of a proper exercise of the federal regulatory power, the lands and facilities which comprise the affected hydroelectric projects (exclusive of federal lands and reservations) remain the property of the respective states, their grantees or permittees and private owners.

This settled principle of law was recognized by Congress early in the development of federal water power legislation. Senator John K. Shields of Tennessee,* eminent legal scholar, jurist and author of the seminal bill (S. 3331) leading to the Federal Water Power Act**, argued vociferously in the second session of the sixty-fourth Congress against amendments providing for a fee upon project licensees for the privilege of building a dam and using the flowing waters to generate power. Senator Shields made it clear that, despite its dominant regulatory power, the federal government lacked constitutional authority to impose a rental fee because the United States has no property interest in navigable waters.* The Senator and many of his colleagues in Congress** relied upon several leading United States Supreme Court decisions which I understand from counsel remain the law of the land today.

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* Senator Shields expressed his legal position on this matter many times, but most notably in a speech given in 1916 while House and Senate conferees considered a measure which had passed the House and S. 3331, which had passed the Senate. 54 Cong. Rec. 1004 (1916).

** The Act was referred to as the Federal Water Power Act until the Wheeler-Rayburn bill of 1935 added Parts II and III and redesignated the Act as the Federal Power Act.

In Martin v. Lessee of Waddell, 41 U.S. (16 Pet.) 366 (1842), Chief Justice Taney spoke for the Court in an opinion resolving a dispute over ownership of certain New Jersey oyster beds.

> [W]hen the revolution took place, the people of each state became themselves sovereign; and in that character, held the absolute right to all their navigable waters, and the soils under them, for their own common use, subject only to the rights since surrendered by the constitution to the general government. (41 U.S. (16 Pet.) at 410).

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* Senator John K. Shields (1858-1934) was a Democrat from Tennessee. He was elected to the Senate in 1913 and reelected in 1918, serving until 1924. Senator Shields served as Chancellor of the Twelfth Division of the State of Tennessee (1892-1894), Associate Justice of the Tennessee Supreme Court (1902-1910) and Chief Justice of the Tennessee Supreme Court. After his two term service as a United States Senator, President Warren G. Harding desired to submit the Senator's name for appointment to the United States Supreme Court, but was dissuaded by Senator Shield's age and ill health. Hale and Merritt, A History of Tennessee and Tennesseeans (1913), p. 2292; Concise Dictionary of American Biography (3d ed. 1964), p. 656.

** Other Senators and Representatives stating concurrent agreement with the position of Senator Shields on this issue include Senators Bankhead (53 Cong. Rec. 2580), Sutherland (53 Cong. Rec. 2580), Thomas (53 Cong. Rec. 2692), Husting (53 Cong. Rec. 2649), Shafroth (53 Cong. Rec. 3243), Galliger (53 Cong. Rec. 3366), Smith (53 Cong. Rec. 3366 and 54 Cong. Rec. 109), Simmons (53 Cong. Rec. 3366), Clarke (53 Cong. Rec. 3366), Works (54 Cong. Rec. 1179), Smoot (54 Cong. Rec. 1179), Clark (54 Cong. Rec. 1179), Nelson (54 Cong. Rec. 778-9), Root (54 Cong. Rec. 778-9), Chilton (54 Cong. Rec. 778-9), O'Gorman (54 Cong. Rec. 778-9), Culberson (54 Cong. Rec. 778-9) and Representatives Sparkman (54 Cong. Rec. 3366), Moon (53 Cong. Rec. 3366), Austin (54 Cong. Rec. 2785-6), Heflin (54 Cong. Rec. 2787), LaFollette (54 Cong. Rec. 2788 and 56 Cong. Rec. 9108), and Sinnott (56 Cong. Rec. 9290).

In a later case involving the navigable waters of Alabama, Pollard's Lessee v. Hagan, 44 U.S. (3 How.) 212 (1845), the Court quoted with approval the foregoing language of Martin and further stated:

> Then to Alabama belong the navigable waters, and soils under them, in controversy in this case, subject to the rights surrendered by the Constitution to the United States; and no compact that might be made between her and the United States could diminish or enlarge these rights. (44 U.S. (3 How.) at 229).

The Court concludes its decision in the Pollard case as follows:

> By the preceding course of reasoning we have arrived at these general conclusions: First, The shores of navigable waters, and the soils under them, were not granted by the Constitution to the United States, but were reserved to the states respectively. Secondly, The new states have the same rights, sovereignty, and jurisdiction over this subject as the original states. Thirdly, The right of the United States to the public lands, and the power of Congress to make all needful rules and regulations for the sale and disposition thereof, conferred no power to grant to the plaintiffs the land in controversy in this case. (44 U.S. (3 How.) at 230).

Many other seasoned Supreme Court decisions reiterate this immutable principle of law. See, United States v. Chandler-Dunbar Co., 229 U.S. 53, 60 (1913); Kansas v. Colorado, 206 U.S. 46, 92 (1907); Shively v. Bowlby, 152 U.S. 1, 58 (1894); Illinois Central Railroad Co. v. Illinois, 146 U.S. 387, 435 (1892); Hardin v. Jordan, 140 U.S. 371, 381-82 (1891); Weber v. Board of Harbor Commissioners, 85 U.S. (18 Wall.) 57, 71 (1873).

Most notably, as explained in the comments of Senator Shields, this principle is not diminished by the oft-cited Chandler-Dunbar decision. Clearly, the Court's decision in that case specified the undeniable predominance of the government's navigational servitude over private property interests of riparian landowners when exercised for commerce clause purposes. Furthermore, the Court determined that ownership of the flowing waters in a navigable stream is "inconceivable." Most importantly, however, the Court decided that because the Company admitted that any structures in the stream found to be an obstruction to the government's navigational purposes could be ordered removed and because the government had paid for all other private property interests except those associated with the disputed claim to the flowing waters, the Chandler-Dunbar Company had no grounds for complaint. Thus, the Chandler-Dunbar decision demonstrates the relationship between the dominant federal power over navigable waters and the coterminus private property rights which exist subject to that power.

Senator Shields' legal analysis was accepted by the Congress which adopted the Federal Water Power Act of 1920. Congress declined to impose rental charges for the use of the flowing navigable waters by licensees. More recent United States Supreme Court case law confirms the vitality of these earlier cases and the applicability of the legal principle accepted by Congress. In Kaiser Aetna v. United States, 444 U.S. 164 (1979), the federal government asserted a public right of access into a private marina development because the developers' dredging of the private lagoon created navigable waters subject to the government's navigable servitude. The Court confirmed the broad regulatory power of the government over navigable waters, stating that,

> [T]here is no doubt that Congress may prescribe the rules of the road, define the conditions under which running lights shall be displayed, require the removal of obstructions to navigation, and exercise its authority for such other reason as may seem to it in the interest of furthering navigation or commerce. (444 U.S. at 174).

But the property subjected to that dominant power remains private property and does not become a public asset merely by reason of its servitude.

> Although the Government is clearly correct in maintaining that the now dredged Kuapa Pond falls within the definition of 'navigable waters' as this Court has used that term in delimiting the boundaries of Congress' regulatory authority under the Commerce Clause, this Court has never held that the navigational servitude creates a blanket exception to the Takings Clause whenever Congress exercises its Commerce Clause authority to promote navigation. Thus, while Kuapa Pond may be subject to regulation by the Corps of Engineers, acting under the authority delegated it by Congress in the Rivers and Harbors Appropriation Act, it does not follow that the pond is also subject to a public right of access. (444 U.S. at 172-3). (Citations omitted).

Thus, the regulatory power of Congress over navigable waters under the Commerce Clause, although unquestionably predominant over private property rights affected by its proper exercise, does not give rise to a proprietary or property interest in the riparian property subject to the Commerce Clause. Exclusive of federal lands and reservations, the property interests comprising the various hydroelectric projects throughout the country remain private property subject to a dominant federal navigational or regulatory power. Such projects are not public assets or a part of the public domain simply because they are subject to the federal regulatory power.

This is especially apparent in the states east of the Mississippi River, such as Alabama, where licensed projects commonly were built with the use of privately owned lands and in river beds owned either by riparian landowners or the respective states. In these cases, the federal government's only cognizable interest is strictly regulatory. Likewise, this is the situation in other regions except where the projects were located on federal reservations but, even then, the project works were constructed with funds provided by the licensee and the licensee is required by license provisions prescribed in accordance with Section 9(e) of the Act to pay annual charges for the use of the government property used in the development and operation of the project. Thus, the project works of the existing licensee and the lands and flowage easements acquired by it are not "public resources", but rather private assets or resources devoted to public service. Except for the states' proprietary rights in the stream bed, many of the projects which could be taken from existing licensees by application of a preference at relicensing are composed entirely of property interests assembled by developers with investment capital. Except for two projects where

Alabama Power Company has added generating facilities to dams constructed for the federal government by the Corps of Engineers (Bankhead and Holt Projects), the Company's projects have been built, at great risk to the investors, upon property acquired by the Company after paying amounts reflecting fair market value at the time of the acquisition. All the improvements constructed on the site by Alabama Power were built without federal funds. The impoundments, equipment, buildings, roads and transmission lines all were constructed, paid for and are owned by Alabama Power. All authorized taxing authorities levy ad valorem taxes against Alabama Power Company as owner of such projects.

Congress' commerce clause power to regulate and improve navigation subjects all works that could impede navigation to a dominant servitude for such federal purposes as may be related to the proper exercise of that power, but the servitude does not divest title from the owner of subjected property or create *sua sponte* a proprietary interest in the federal government. For example, if the federal license for an existing project is taken from Alabama Power and issued to a municipality based upon a statutory preference, the property interests comprising that project will remain in Alabama Power until transferred by a properly executed deed or a condemnation order upon payment of the required compensation.

Mr. MIELKE. I believe Walter Sandberg is next.

STATEMENT OF WALTER G. SANDBERG, GOVERNMENTAL AFFAIRS DIRECTOR, WISCONSIN PUBLIC SERVICE CORP.

Mr. SANDBERG. Mr. Chairman, members of the committee, my name is Walt Sandberg. I represent Wisconsin Public Service Corp., Green Bay, WI. My company serves 298,000 electric service accounts in northeastern and north central Wisconsin and a small portion of the Upper Peninsula of Michigan. My company operates 13 hydroelectric projects with a total capacity of 65 megawatts, all of which are subject to relicensing proceedings between 1986 and 1993.

The company's largest hydroelectric project, Grandfather Falls, in Lincoln County in north central Wisconsin is rated at 17 megawatts and licensed as FERC project 1966. It was built in 1939 for an original construction cost of $2,136,000. Its present license expires on December 31, 1987.

Wisconsin Public Power, Inc., a consortium of 28 of Wisconsin's 81 municipal electric utilities has filed a competing appliction under the municipal preference clause. The municipal electric utility members of Wisconsin Public Power serve about 65,000 residential and electric consumers as opposed to the approximately 268,000 residential electric consumers served by my company.

None of the residential electric consumers who are served by Wisconsin Public Power, Inc., members live nearer than about 40 miles from Grandfather Falls, whereas Wisconsin Public Service serves the area immediately around the project.

In its application to FERC, Wisconsin Public Power also stated that it intended to dispatch the energy produced by Grandfather Falls from a control center operated by one of its members in Kaukauna, WI, which is more than 100 miles away from the project.

Thus, if Wisconsin Public Power is successful in obtaining the license for Grandfather, customers and citizens living in the immediate area will lose the benefit of the lower cost electric energy produced at Grandfather and will be subsidizing to some extent customers of Wisconsin Public Power members, a majority of whom live more than 100 miles away from the project.

Wisconsin Public Power in its application details how it expects to finance the acquisition of Grandfather Falls by issuing revenue bonds for about $3.6 million, which is its estimate of the value of the total physical assets and the legal, financial, and engineering costs associated with acquiring the project.

Further, Wisconsin Public Power estimates the annual average cost of the project, including debt service, payment in lieu of taxes, depreciation charges, and operation and maintenance at $974,300, and the annual value of project power at $7.4 million, for an annual average excess of value over cost of $6.5 million.

Considering that Wisconsin Public Power will need revenue bond financing of a mere $3.6 million to obtain a source of electric energy with an estimated excess of annual value over cost of $6.5 million, I think you will agree that that is an excellent payback by any standard, about 6 months in fact.

Moreover, the cost to Wisconsin Public Service to replace this capacity with the only available alternative, coal, is estimated at a conservative $17 million, at a minimum again, plus an annual fuel cost differential premium of approximately $2 million.

I think these statistics demonstrate the unfairness of the application of the municipal preference clause and the net investment acquisition concept to the relicensing of existing hydroelectric projects. I think further demonstrated in that is that the Lincoln County Board of Supervisors passed a resolution in support of S. 426 because they have an interest in the fact that the benefits of the power accrue to those living near the project.

For these reasons, I would urge the committee to support S. 426 and its concepts. That concludes my statement.

[The prepared statement of Mr. Sandberg follows:]

STATEMENT OF
WALTER G. SANDBERG
Governmental Affairs Director
Wisconsin Public Service Corporation
700 North Adams Street
P.O. Box 19001
Green Bay, WI 54307-9001
before
SENATE ENERGY SUBCOMMITTEE ON WATER & POWER
June 11, 1985

My name is Walter G. Sandberg. I am Governmental Affairs Director for Wisconsin Public Service Corporation, Green Bay, Wisconsin.

Wisconsin Public Service is a regulated public utility company that serves northeastern and north central Wisconsin and a small portion of the Upper Peninsula of Michigan. We have 298,000 electric service accounts.

The company operates thirteen hydro-electric projects with a total capacity of 65 megawatts which are subject to relicensing proceedings between 1986 and 1993.

The company's largest hydro-electric project, Grandfather Falls, on the Wisconsin River north of the City of Merrill in Lincoln County, is rated at 17 megawatts and licensed as FERC Project 1966. Its present license expires December 31, 1987.

Wisconsin Public Power, Inc., (WPPI), a consortium of 28 of Wisconsin's 81 municipal electric utilities, has filed a competing application to be awarded the new license under the municipal preference clause under Section 7 (a). The municipal electric utility members of WPPI serve about 65,000 residential electric customers, as opposed to the approximately 268,000 residential electric customers served by my company.

None of the residential electric customers who are served by WPPI members live nearer than about 40 miles from Grandfather Falls, whereas Wisconsin Public Service serves the area immediately around the project.

In its application to FERC, WPPI also stated that it intended to dispatch the energy produced by Grandfather Falls from a control center operated by one of its members in Kaukauna, Wisconsin, which is more than 100 miles away.

Thus, if WPPI is successful in obtaining the license for Grandfather Falls, customers and citizens living in the immediate area will lose the benefit of the lower cost electric energy produced at Grandfather Falls and will be subsidizing, to some extent, customers of WPPI members, the majority of whom live more than 100 miles away.

WPPI, in its application, details how it expects to finance the acquisition of Grandfather Falls by issuing revenue bonds for $3,598,644, which is its estimate of the value of the total physical assets and legal, financial and engineering costs. (See Page D-2, WPPI Application FERC 1966-002, March 1984). Further, WPPI estimates the average annual cost of the project, including debt service, payment in lieu of taxes, depreciation charges and operation and maintenance at $974,312; and the annual value of project power at $7,493,954, for an annual average of excess of value over cost of $6,519,642.

Considering that WPPI will need revenue bond financing of a mere $3.6 million to obtain a source of electric energy with an estimated excess of annual value over cost of $6.5 million, this is an excellent payback by any standard.

Moreover, the cost to Wisconsin Public Service to replace this capacity with the only available alternative is estimated to be $17 million, at a minimum, plus an annual fuel cost differential premium of approximately $2 million.

These statistics demonstrate the unfairness of the application of the municipal preference clause and the "net investment" acquisition concept to the relicensing of existing hydro-electric projects.

For these reasons, I would urge you to support S. 426 as written.

This concludes my statement.

—The Daily Herald, Wausau-Merrill, Wis.—Thursday, May 24, 1984

Utilities may be forced to sell dan

Agenc ; says cities should have first dibs on hydro plants

)EWEY PFISTER
rill News Editor

ive Wisconsin utilities could be ed to sell 48 hydroelectric dams $48 million and then spend $32 lion each year to get electricity m other sources.

hat annual cost could be passed o customers. No one knows how the change would increase

e Federal Energy Regulatory mission says that municipalities ld be able to buy hydro dams investor-owned utilities when me to relicense them.

dro plant purchases should be ok or depreciated value, not re- ement cost, the commission

s hydro plants in north central onsin owned by Wisconsin Pub- Service Corp. could be affected n licenses expire.

isconsin Public Power Incor- ted System, Sun Prairie, has an application to buy Grand- er Falls dam, between Merrill Tomahawk. The system repre- s 27 of 84 municipally owned er utilities in the state.

e nearest Wisconsin Public er member utility is Kaukauna. e River, Florence and Marsh- also have municipal electric ties but don't belong to the sys-

randfather Falls is an attrac- site," said David Penn, Wiscon- Public Power's general man- er. "It could cut power costs to customers." The hydro plant s built in 1938 for $2.1 million.

The Federal Power Act of 1920 ve municipalities perference in li- sing a hydro site. That is now ng interpreted to say that munic- lities should have the first oppor- nity to buy existing hydro plants.

President Paul Ziemer said the deral law is unfair to Public Ser- e customers because they might to pay for new electricity sources to replace those lost to municipal utilities.

The courts or Congress will eventually decide if municipal utilities can take over investor-owned hydro plants.

A House bill would allow utilities like Public Service to relicense existing hydro plants unless the regulatory commission decides the plant would not be operated in the public interest.

The measure has the support of the state Public Service Commission and most House members from Wisconsin but there is little chance it will be approved before Congress adjourns this fall, said Walt Sandberg, Public Service public affairs director.

Hydro power is produced at about one fifth the cost of coal-fired generators, Sandberg said. The five investor-owned utilities in the state estimate that replacing their 48 hydro plants with other generating facilities could cost $58 million a year.

Only 10 municipal power utilities in the state have hydro or coal-fired generating plants, Penn said. Most purchase electricity at wholesale prices from investor-owned utilities.

Wisconsin Public Power has also filed an application to acquire the Hatfield dam of Northern States Power near Black River Falls.

Penn said the municipal utility is also looking at buying other investor-owned hydro plants.

"Our first choice would be to buy in to existing and new electric power facilities," he said. "We would like to have a mix of power sources.

"Our ultimate goal is to substitute the purchase of power with our own generating facilities and transmission lines."

When hydro plants' licenses expire

Tomahawk	1986
Grandfather Falls, between Merrill and Tomahawk	1987
Otter Rapids, between Tomahawk and Rhinelander	1990
Jersey, north of Tomahawk	1993
Wausau	1995
Alexander at Merrill	relicensed annually

Source: Wisconsin Public Service Corp.　Daily Herald graphic

BUSINESS/FINANCE

WPS opposes plant sale plan

Harry Maier
Of the Press-Gazette

Would you like to sell your home for what you paid for it or even less than what you paid for it, say 20 years ago?

The answer is an obvious no, the same reason why Wisconsin Public Service Corp. is taking an exception to possibly being forced into selling its hydroelectric plants located throughout its system.

The problem arises from a new interpretation of the Federal Power Act, passed in 1920, now being enforced by the Federal Energy Regulatory Commission. At issue is the expiration of licenses to operate hydroelectric plants by utilities and establishing municipalities as eligible to purchase them.

Relicensing is in jeopardy because the legislation includes a preference clause which would permit a municipality such as a city, county, irrigation district, drainage district or other political subdivision to acquire the hydroelectric plant without paying the current market value.

Instead, a municipality would pay at book value, or the depreciated value of the plant. That's a real deal.

In addition, the municipality would not be required to have experience in operating such a business.

WPS officials have estimated that the sale of its properties might bring in $5.6 million in revenues, but it then would have to spent $50 million to replace the lost capacity of those plants.

The WPS hydroelectric plants generate about 5 percent of the utility's total electricity.

Nationally, the action could affect 166 hydroelectric plants which are investor-owned and subject to relicensing between now and Jan. 1, 1994.

Here is the potential effect of the legislation if WPS were forced to sell the hydroelectrict plants:

- Replacement power from currently available coal-fired generation, based on the difference in fuel cost alone, would increase costs to WPS and its customers by $8 million annually.
- That would increase the electric bill of each WPS electric customer by about $10 annually.
- If forced to sell, WPS would receive about $5.6 million, its net investment. Replacement capacity would require an investment of about $53 million.
- Replacement capacity would increase WPS costs about an additional $11.7 million annually in carying charges.
- The state would lose about $166,600 annually in ad valorem and property taxes.

Here are the 13 WPS plants due for licensing renewal, the river, date constructed, capacity in kilowatts and original construction cost:

Otter Rapids, Wisconsin, 1907, 500 kw, $137,000.

Grand Rapids, Menominee, 1910, 7,020 kw, $874,000.

High Falls, Peshtigo, 1910, 7,000 kw, $1,116,000.

Peshtigo, Peshtigo, 1920, 584 kw, $190,000.

Wausau, Wisconsin, 1921, 5,400 kw, $1,407,000.

Potato Rapids, Peshtigo, 1921, 1,380 kw, $316,000.

Jersey, Tomahawk, 1922, 512 kw, $263,000.

Johnson Falls, Peshtigo, 1923, 3,520 kw, $602,000.

Caldron Falls, Peshtigo, 1924, 6,400 kw, $848,000.

Alexander, Wisconsin, 1925, 4,200 kw, $731,000.

Sandstone Rapids, Peshtigo, 1925, 3,840 kw, $610,000.

Tomahawk, Wisconsin, 1938, 2,600 kw, $542,000.

Grandfather Falls, Wisconsin, 1939, 17,240, $2,136,000.

The utilities face a tough battle to get the ruling changed. The FERC decision already has been upheld by a federal district court and the Supreme Court has refused to hear the appeal.

The next step is congressional legislation to clarify the Federal Power Act as it applied to the preference rule.

It's likely Congress would support such a change; the customers of the electric utilities also are congressional constituents.

RESOLUTION NO. 13

SUPPORTING HOUSE RESOLUTION 4402

THE "ELECTRIC CONSUMERS PROTECTION ACT OF 1984"

WHEREAS, Lincoln County has three hydroelectric projects (Grandfather Falls, Jersey and Tomahawk) which are subject to relicensing by the Federal Energy Regulatory Commission (FERC) between 1986 and 1993, and

WHEREAS, the citizens of Lincoln County directly benefit from the low-cost energy produced in these plants by Wisconsin Public Service Corporation, the present license holder, and

WHEREAS, Section 7 of the Federal Power Act of 1920, under one interpretation would not allow Wisconsin Public Service Corporation a fair and equal opportunity to compete for the licenses as they come up for renewal because of the "municipal public preference clause," and

WHEREAS, the benefits of the low-cost hydroelectric energy produced in Lincoln County would be denied its citizens and transferred to consumers living elsewhere should Wisconsin Public Service Corporation fail to relicense the projects because of this interpretation of a very old law, and

WHEREAS, House Resolution 4402, the "Electric Consumers Protection Act of 1984," was introduced in the U.S. House of Representatives November 16, 1983, to establish fair and equal competition for license renewal, and

WHEREAS, as of May 20, 1984, more than 90 members of Congress have co-sponsored H.R. 4402, among them Wisconsin Congressmen Aspin, Gunderson, Kastenmeier, Moody, Obey, Petri, Roth, and Sensenbrenner, and

WHEREAS, H.R. 4402 has been endorsed by, among others, the Public Service Commission of Wisconsin, the National Association of Regulatory Utility Commissioners (NARUC), the American Association of Retired Persons (AARP), the Wisconsin Legislative Committee of the AARP, the U.S. Chamber of Commerce, and the American Paper Council,

BE IT THEREFORE RESOLVED, that the Lincoln County Board of Supervisors hereby endorses and supports H.R. 4402, and

BE IT FURTHER RESOLVED, that a copy of this resolution be directed to each member of Wisconsin's Congressional delegation and to Senators Kasten and Proxmire.

Dated this 19th day of June, 1984.

Prepared by: Thomas Geiger

Introduced by: Lincoln County Resource Committee

Ewald Katke, Jr., Chairman

Clarence Krueger

Ernest Townsend

Harry Osness

Lawrence Holl

APPROVED BY UNANIMOUS VOTE 6/19/84

NO.

RESOLUTION ENCOURAGING ADOPTION
OF H.R. 44 AND S. 426
THE "ELECTRIC CONSUMERS PROTECTION ACT OF 1985"

TO THE CHAIRPERSON AND BOARD OF SUPERVISORS
OF ONEIDA COUNTY, WISCONSIN

Supervisors:

WHEREAS, Wisconsin's federally licensed hydro-electric projects produce energy at significantly lower costs than electricity obtainable from other sources, and

WHEREAS, all the citizens of Oneida County currently enjoy monthly utility bills lower than what they would be if their suppliers did not have access to the economic benefits of low-cost hydroelectric power, and

WHEREAS, Section 7 of the Federal Power Act of 1920, under one interpretation, would not allow the state's investor-owned utilities, including Wisconsin Public Service Corporation, a fair and equal opportunity to compete for the licenses as they come up for renewal because of the "municipal public preference clause", and

WHEREAS, H.R. 44 and S. 426, the "Electric Consumers Protection Act of 1985", would establish fair and equal competition for license renewal, and

WHEREAS, more than 125 members of Congress have co-sponsored H.R. 44 including Congressman Obey and seven members of Wisconsin's Congressional delegation, and

WHEREAS, S. 426 also has bipartisan support in the U.S. Senate and has been co-sponsored by Wisconsin's Senator Kasten, and

WHEREAS, this legislation has been endorsed by, among others, the Public Service Commission of Wisconsin, the National Association of Regulatory Commissioners, the American Association of Retired Persons (AARP), and the Lincoln County Board of Supervisors, and

WHEREAS, failure to enact this legislation will allow a small minority of the electric ratepayers in the State of Wisconsin to benefit from low-cost hydro-electric power to the detriment of the vast majority of other electric ratepayers, including those in Oneida County;

BE IT THEREFORE RESOLVED, that the Oneida County Board supports H.R. 44 and S. 426 as being in the best interest of all the citizens of Oneida County, regardless of the electric supplier, and

BE IT FURTHER RESOLVED, that a copy of this resolution be directed to each member of Wisconsin's Congressional delegation and to Senators Kasten and Proxmire.

Dated this _______ day of _______________, 1985.

Respectfully submitted;

_____________________ Committee

FOR CONSIDERATION BY BOARD JUNE, 1985

THE NEED FOR LEGISLATION TO AMEND THE FEDERAL POWER ACT

(49 Stat. 868, 16 USC 791a, as amended)

THE ISSUE: Between now and the year 2023, the Federal Energy Regulatory Commission (FERC) licenses for 48 hydroelectric projects originally developed and currently operated by 5 investor-owned electric utilities 1/ in Wisconsin and Michigan will expire (see attached). Recent rulings by FERC and the courts place relicensing by these utilities in jeopardy, because of a narrow interpretation of the "preference clause" in Section 7 of the Act. Moreover, the interpretation would allow a "municipality" 2/ successfully pursuing the license to avoid paying just compensation in any takeover.

Nationally, between now and January 1, 1994, the interpretation will affect about 168 hydroelectric projects currently operated by investor-owned utilities. The customers of the utilities operating these plants are saved the equivalent of from $1 billion to $3.5 billion per year in fuel costs.

The interpretation also allows a competing municipality a distinct advantage by:

- Permitting it to file its application after the current licensee has filed.
- Requiring that it must indicate it can operate the project only as well as the current licensee, rather than show it can operate it better than the current licensee.
- Allowing it a "second chance" application if its initial filing does not show it can operate the project as well as the current licensee.

1/ The 5 Wisconsin investor-owned utilities are Lake Superior District Power Company (LSDP), Northern States Power Company-Wisconsin (NSP), Wisconsin Electric Power Company (WE), Wisconsin Power & Light Company (WPL), and Wisconsin Public Service Corporation (WPS). In addition, licensed projects of the Wisconsin River Power Company (WRP), of which WPS and WPL are part owners, are included.

2/ The Federal Power Act defines a "municipality" as "a city, county, irrigation district, drainage district, or other-political subdivision or agency of a state competent under the laws thereof to carry on the business of developing, transmitting, utilizing, or distributing power." Under current interpretations, the "municipality" need not have experience in the business, nor even have an operating organization in place to compete for a license.

ACTION REQUIRED: Support and enact H.R. 44 or S. 426, the "Electric Consumers Protection Act of 1985," (copy attached) which would:

- Provide that the "preference clause" in Section 7 apply only to: (a) newly proposed projects, (b) projects that the current licensee is not filing to relicense, and (c) projects that do not meet the licensing standards set forth in Section 10(a) of the Act.
- Permit takeover only upon payment of just compensation in an amount that FERC shall determine in accordance with due process of law.

AN IMPORTANT CONSIDERATION: The preference clause would allow a privileged few to acquire, without just compensation, hydroelectric projects which now benefit many. Is this good public policy?

	ELECTRIC CUSTOMERS SERVED	
Wisconsin Utilities	Residential and Rural	Commercial and Industrial
5 Investor Owned Utilities	1,420,000	157,400
83 Municipal Utilities	142,200	17,600
30 Rural Electric Cooperatives 3/	166,000	6,400

- The 5 investor owned utilities serve about 1,278,000 more residential and rural electric customers than the 83 municipal utilities combined. Is it fair to require the investor-owned utilities customers to subsidize a group that already receives preferential tax subsidies and tax-exempt financing which result in lower rates?

3/ Under the current interpretation of the Federal Power Act, "municipalities" also have preference over rural electric cooperative hydroelectric projects subject to relicensing.

EFFECT ON THE 5 INVESTOR OWNED UTILITIES AND THEIR CUSTOMERS: If the Federal Power Act is not amended, and all 48 hydroelectric projects 4/ currently licensed and operated by the 5 utilities are "taken over" 5/ under the preference clause, the results will be as follows:

- Replacement power from currently available coal-fired generation, based on the difference in fuel cost alone, will increased costs to the 5 utilities, and therefore to their customers, by about $32,158,000 annually. 6/

- If the 5 utilities were forced to sell their properties, they would receive only about $48,000,000 -- their "net investment" -- plus unspecified severance damages. New, replacement capacity, would require an investment of about $325,300,000 (1983 dollars). 7/

- The 5 utilities will eventually need to replace this lost capacity at the then current fair market value. This would increase their costs about an additional $58,554,000 annually (1983 dollars) in carrying charges. 8/

- Wisconsin counties and townships would lose about $1,100,000 annually in ad valorem and property taxes and Michigan local units of government would lose about $922,000 annually which would then need to be borne by other taxpayers.

4/ 325,300 kilowatts capacity: 1,567,430,000 kilowatt hours annually based on long term average generation. (See attached.)

5/ The preference "municipality" need not be a Wisconsin entity. A Michigan or Minnesota "municipality," for example, could move to takeover a licensed project in Wisconsin.

6/ Based on a composite 1982 fossil fuel cost of $0.02052/kwh.

7/ 325,300 kw x $1,000/kw.

8/ Assuming an annual carrying charge of 18%. $325,300,000 x .18 = $58,554,000.

BACKGROUND:

- Under the Federal Water Power Act of 1920 (reenacted as Part 1 of the Federal Power Act of 1935) most hydro plants which the investor-owned utilities use to serve their customers were licensed by the Federal Power Commission, now FERC, for 50 years. (Some projects are currently operated under annual licenses, pending resolution of the issue.)

- When a license expires, the Act calls for a regulatory review by FERC before a new license is issued to the original license holder or another party.

- Until recently the utilities, and even the FPC (now FERC), read the Act to say that, at a minimum, if the federal government did not move to "take over" a utility project, then no preference for states or municipalities would apply in competitive relicensing.

- In 1980, under the Carter Administration, FERC ruled in Opinion 88 that public-power entities have preferential rights not only to new hydro projects, but also to existing projects when they come up for relicensing. In thus interpreting the Federal Power Act, FERC sought to permit the city of Bountiful, Utah, to take over a hydro dam from Utah Power & Light.

- In 1981, under the Reagan Administration, a "new" FERC -- headed by Reagan appointee C. M. Butler III -- stuck by the Carter FERC. The relicensing case was by that time before a U.S. Appeals Court, and the new FERC filed a brief reaffirming that, where competing applications have equal merit, the "tie-breaker" favors public power.

- In September 1982, the appeals court upheld FERC. While agreeing with FERC that the Federal Power Act was fuzzy on the relicensing question, the court gave "great deference" to FERC's interpretation favoring public power: "We have reviewed the commission's interpretation . . . and deem such construction consistent with the statute's language, structure, scheme, and available legislative history."

- In February 1983, 37 investor-owned utilities appealed to the U.S. Supreme Court. They noted the cosmic sweep of the appeals court's decision: It could force private utilities eventually to turn over 490 major hydro projects to public-power entities; the replacement cost of those plants would be some $21 billion.

- In April 1983, Chairman Butler convinced FERC that it should reconsider the relicensing issue. The Commission next asked the Justice Department to petition the Supreme Court to accept the case, to vacate the appeals court decision, and to remand the case to the appeals court with instructions to remand it to FERC.

- In May 1983, giving FERC most of what it wanted, the Justice Department asked the Supreme Court to remand the case to the appeals court, but stopped short of asking that it be remanded all the way back to FERC. "A majority of the commissioners appear to be ready to overrule" the Commission's own original decision in the case, said Justice.

- On July 6, 1983, the Supreme Court refused to hear the appeal of the 37 investor-owned utilities to reverse the 1980 FERC decision.

- On October 6, 1983, in Opinion 191, FERC overturned the ruling of its administrative law judge and awarded the license of the 136 MW Merwin Dam project in Washington state to the current licensee, Pacific Power and Light Company. The license was also being sought by a coalition of municipal utilities. FERC abandoned Opinion 88 issued in 1980 in the "Bountiful" case. This ruling opens the door for another round of litigation.

- On November 14-17, 1983, the National Association of Utility Regulatory Commissioners (NARUC), at its annual meeting in Detroit, adopted a resolution supporting legislation to amend the Federal Power Act to "provide that any existing hydroelectric project shall receive a new license ... unless the licensee's past and future operation of the project would not be in the public interest as determined by the FERC."

- On November 16, 1983, H.R. 4402, the "Electric Consumers Protection Act of 1983, "was introduced by Congressman Shelby (D-7th-AL) and 44 co-sponsors.

- On March 29, 1984, Congressman Ottinger (D-NY) introduced H.R. 5299, the "Public Interest Hydroelectric Facility Relicensing Reform Act of 1984." The bill would maintain the preference clause and adds restrictions which would make it even more difficult for present IOU license holders to relicense.

- On March 30, 1984, Wisconsin Public Power, Inc., (WPPI) filed an application with the FERC to compete with WPS for the license at Grandfather Falls on the Wisconsin River in Lincoln County above the City of Merrill.

- On April 11, 1984, Congressman Gore (D-TN) introduced H.R. 5416, the "Electric Utility Competition Act of 1984," which would extend preference to rural electric cooperatives and require anti-trust review in the event there is competition for an existing license. The intent is to make it easier for the municipal competitor to gain access to and "wheel" energy over transmission lines owned by others.

- On May 17, 1984, Congressman Ottinger held a public hearing on the issue before the House Subcommittee on Energy Conservation and Power, of which he is chair.

- On May 24, 1984, S. 2710 was introduced by Senator Wallop (R-WY) and eleven others, including Senator Goldwater (R-AZ), Senator Cranston (D-CA), and Senator Kasten (R-WI). The bill is identical to H.R. 4402.

- By June 15, 1984, H.R. 4402 had 102 co-sponsors, including all nine members of the Wisconsin Congressional (House) delegation.

- On June 19, 1984, the Lincoln County (WI) Board of Supervisors unanimously approved a resolution supporting H.R. 4402.

- On January 3, 1985, Congressman Shelby (D-AL) and 58 others introduced H.R. 44, the "Electric Consumers Protection Act of 1985, which is identical to H.R. 4402.

- On February 7, 1985 Senator Wallop (R-WY) and 12 others introduced S. 426, which is identical to S. 2710.

- On June 11, 1985, the Senate Energy Subcommittee on Water & Power held a hearing on S. 403 (Johnston D-LA) and S. 426.

Revision
5/31/85

5 WISCONSIN INVESTOR OWNED UTILITIES
FERC HYDRO LICENSES

License Number	Licensee	Plant Name(s)	Nameplate Capacity Rating - MW	Present License		
				Issued	Effective	Expires
2525	WPS	Caldron Falls	6.40	1969	1965	1993
2546	WPS	Sandstone Rapids	3.84	1969	1965	1993
2550	WE	Weyauwega	0.40	1968	1965	1993
2560	WPS	Potato Rapids	1.38	1968	1965	1993
2564	LSDP	Orienta Falls	0.80	1968	1965	1993
2581	WPS	Peshtigo	0.58	1968	1965	1993
2587	LSDP	Superior Falls	1.32	1968	1965	1993
2595	WPS	High Falls	7.00	1976	1962	1993
2711	NSP	Trego	1.20	1977	1943	1993
1999	WPS	Wausau	5.40	1976	1970	1995
1980	WE	Big Quinnesec	19.50	1949	1948	1998
1982	NSP	Holcombe	33.75	1949	1948	1998
1984	WRP	Petenwell & Castle Rock	35.00	1950	1948	1998
2567	NSP	Wissota	36.00	1980	1950	2000
2670	NSP	Dells	9.50	1980	1950	2000
1759	WE	Michigamme Reservoir & Way	1.80	1974	1974	2001
		Peavey Falls	12.00			
		Twin Falls	6.10			
2073	WE	Michigamme Falls	9.60	1951	1951	2001
2074	WE	Hemlock Falls	2.80	1951	1951	2001
2679	NSP	Cedar Falls	6.00	1981	1956	2001
2072	WE	Lower Paint	0.10	1951	1952	2002
2131	WE	Kingsford	7.20	1979	1979	2004
2181	NSP	Menomonie	5.40	1956	1955	2005
2639	NSP	Cornell	30.90	1973	1973	2023

WISCONSIN MUNICIPAL ELECTRIC UTILITY MEMBERSHIP IN WISCONSIN PUBLIC POWER INCORPORATED SYSTEM (WPPI)

P. O. Box 44
Sun Prairie, WI 53590

WPPI is authorized by Wisconsin Statute Sec. 66.073. It is empowered to acquire, develop, and operate electric generating projects and to transmit and distribute energy from the projects for resale to its member municipal electric utilities. Members and non-members are listed below. The figure following the name of the municipality is the number of residential customers it served as of year-end 1983.

WPPI Non-Members

- Argyle (335)
- Bangor (882)
- Barron (1147)
- Benton (362)
- Black Earth (724)
- Bloomer (1328)
- Brodhead (1236)
- Cadott (487)
- Cashton (345)
- Centuria (311)
- Clintonville (2957)
- Columbus (1931)
- Cornell (617)
- Cumberland (911)
- Elkhorn (1896)
- Elroy (634)
- Evansville (1227)
- Fennimore (947)
- Footville (340)
- Gresham (744)
- Hazel Green (443)
- Hustisford (593)
- Juneau (655)
- LaFarge (313)
- Lodi (830)
- Manitowoc (12726)
- Marshfield (6909)
- Mazomanie (600)
- Medford (1702)
- Merrillan (385)
- Mt. Horeb (1471)
- New Glarus (674)
- New Lisbon (485)

WPPI Members

- Algoma (908)
- Black River Falls (1719)
- Boscobel (1300)
- Cedarburg (3690)
- Cuba City (723)
- Deerfield (504)
- Eagle River (666)
- Florence (658)
- Hartford (2477)
- Jefferson (2758)
- Kaukauna (7098)
- Kiel (1306)
- Lake Mills (1849)
- Menasha (5948)
- Muscoda (377)
- New Holstein (1727)
- New London (2530)
- New Richmond (1728)
- Oconomowoc (4480)
- River Falls (2430)
- Slinger (531)
- Sturgeon Bay (5373)
- Two Rivers (5053)
- Waterloo (1181)
- Waunakee (1351)
- Waupun (2775)
- Westby (738)
- Whitehall (674)

(cont.)

WPPI Non-Members

Oconto Falls (943)
Pardeeville (777)
Plymouth (4462)
Prairie du Sac (863)
Princeton (714)
Reedsburg (2130)
Rice Lake (2983)
Sauk City (1025)
Shawano (3456)
Sheboygan (2281)
Shullsburg (537)
Stoughton (4678)
Stratford (356)
Sun Prairie (4510)
Trempealeau (429)
Viola (409)
Wisconsin Dells (1006)
Wisconsin Rapids (9112)
Wonewoc (350)

WPPI Members

WPPI Non-Members: 53

Residential Customers
Served: 90,300

WPPI Members: 28

Residential Customers
Served: 62,552

THE TOMAHAWK LEADER—Wednesday, June 20, 1984—

Supervisors Back Power License Bill

Noting that Lincoln County has three hydroelectric projects which are subject to relicensing by the Federal Energy Regulatory Commission, the Lincoln County Board on Tuesday voted support to a U.S. House of Representatives resolution, the Electric Consumers Protection Act of 1984.

Two of the county's hydroelectric projects are near Tomahawk, at Jersey Dam and Tomahawk Dam, and the other is at Grandfather Falls between Tomahawk and Merrill.

All three are operated by Wisconsin Public Service Corp., the present license holder. They are subject to relicensing between 1986 and 1993.

The County Board's resolution said the Federal Power Act of 1920, under one interpretation, would not allow WPSC "a fair and equal opportunity to compete for the licenses as they come up for renewal because of a municipal public preference clause."

The resolution said "the benefits of the low-cost hydroelectric energy produced in Lincoln County would be denied its citizens and transferred to consumers living elsewhere" should WPSC fail to relicense the projects "because of this interpretation of a very old law."

The Electric Consumers Protection Act of 1984 was introduced in the U.S. House of Representatives in the fall of 1983 to establish fair and equal competition for license renewal, the resolution said. It has been co-sponsored by more than 90 members of Congress, among them Wisconsin Congressmen Aspin, Gunderson, Kastenmeier, Moody, Obey, Petri, Roth and Sensenbrenner.

Senator EVANS. Thank you, Mr. Sandberg.

Mr. Terry.

Mr. MIELKE. Mr. Terry, Niagara Mohawk, NY.

STATEMENT OF JOHN H. TERRY, SENIOR VICE PRESIDENT, NIAGARA MOHAWK POWER CORP.

Mr. TERRY. Senator Evans, Senator Johnston.

My name is John Terry. I am senior vice president, general counsel, of Niagara Mohawk Power Corp. that provides service to 3.5 million residents of upstate New York encompassing more than half the mass land area of the State.

I join my colleagues in expressing appreciation to you for holding this hearing and listening to us this morning, and concur with the statements made by Mr. Mielke and my other colleagues on the panel. I would like to adopt the testimony tendered previously to the committee and ask that it be taken into the record.

Senator EVANS. It will be part of the record.

Mr. TERRY. Rather than repeating the statements that have been made, I would like to make some specific observations concerning the New York situation, because of the New York Power Authority and the substantial interest and intended impact of the small hydro producers that were spawned since the adoption by Congress of PURPA, the Public Utility Regulatory Practices Act of 1980. I will revisit that comment in a moment, but first let me spend a moment establishing the statistical base for the present.

The distinguished senior Senator from California and California Commissioner Bagley said that the private utilities out there represent 85 percent of the constituency in terms of providing power. Let me say that in New York State the investor-owned utilities serve 98 percent of the 18 million people. That is 98 percent of 6.5 million residences.

In turn, the municipals serve 335,000 people spread throughout the State. Conventional hydroplants produce 4,012 megawatts of generation, and that is about 13 percent of the total requirements of the number. Of that number, 85 percent are produced by the power authority, with the remaining 15 percent the investor-owned utilities.

Continued operation of existing hydroelectric projects in New York, investor-owned utilities, is in the public interest, and it is my desire to cite several reasons why this is obvious.

Obviously, the electric needs far exceed the hydro resources in the State. Municipals currently receive large amounts of Government-owned hydropower from the State power authority, Niagara, and the St. Lawrence projects. That total capacity is in excess of 3,000 megawatts of capacity. These projects could not have gotten off the ground without the contracts with the investor-owned utilities to take the output of that, or there would not have been financing in those instances.

Let me cite several specific reasons. Diverse aspects of Federal law, including PURPA and the public regulatory commission policy result in electric utilities having a far lower margin or ceiling in the economic development of capital-intensive hydroelectric projects that is the case for the PURPA-spawned developers.

Having a greater margin with which to work, either the municipality or the private developer may be able to promise and deliver more in a relicensure proceeding in terms of capacity, energy, environmental and recreational amenities, not because of the unwillingness or lack of expertise or efficiency on the part of the utility, but solely because of the dollar and cents considerations dictated by the disparate institutional and legal frameworks in which the utilities must conduct their business as opposed to municipalities or PURPA-owned or spawned developments.

The result is that the utilities are forced to relinquish their projects upon relicensure. Those are in business because of PURPA. They are relying on tax provisions and other statutorily created incentives that make profits where the economics just do not exist, for the reasons the compensation provision of S. 426 is extremely important to Niagara Mohawk's customers.

I feel constrained also to address the argument that a municipal preference must exist in the relicensing context in order to spur competition and thus ensure the best overall comprehensive development plans. Niagara Mohawk's experience has been quite to the contrary.

In 1977, Niagara Mohawk announced an ambitious hydroelectric development program. The development plans of Niagara Mohawk were motivated by the evolving economic attractiveness of certain hydroelectric generation as a result of the oil crisis in 1973. Competition from the PURPA-spawned developers played no part in the program, nor did the energy tax credits nor the investment tax credits which are playing a role in the development today. But we continued with that in terms of recreation. In 1969 Niagara Mohawk moved to comprehensively address the recreational development potential within the service territory and within the 80 hydroelectric plants which we have and operate in our service territory. It did so by submission of a systemwide recreation plan to the Public Service Commission of our State.

Again, competition played no part in the submittal of this statewide recreation plan. The prospect or reality of competition from PURPA-spawned developers has basically made the planning a shambles. We cannot carry out that program in 1977 because we are reacting to the PURPA-spawned developers and thus continually amending our plan because of that.

The competition for sites, capacity additions, has now staggered the Federal Energy Regulatory Commission, as was stated earlier this morning. Also, the state fish and wildlife agencies are having a difficult time keeping up with the review of applications.

In summary, the net results of competition have been the creation of a series of peaks and valleys in terms of manpower scheduling and expense, as opposed to the levelized approach desired by Niagara Mohawk.

Congress should promote fair competition for hydro development. Congress should ensure that existing licensees receive the constitutional standard of just compensation in the event that a project is licensed to another. S. 426 in our opinion is the act that we would like to espouse, and we endorse it and urge its enactment.

And again, thank you very much for this opportunity to come before you this morning.

[The prepared statement of Mr. Terry follows:]

STATEMENT OF

JOHN H. TERRY*

SENIOR VICE PRESIDENT

GENERAL COUNSEL AND SECRETARY

NIAGARA MOHAWK POWER CORPORATION

SYRACUSE, NEW YORK

BEFORE THE

SUBCOMMITTEE ON WATER AND POWER

OF THE

SENATE COMMITTEE ON ENERGY

AND NATURAL RESOURCES

JUNE 11, 1985

Mr. Chairman and members of the Subcommittee, my name is John H. Terry. I am Senior Vice President, General Counsel and Secretary for Niagara Mohawk Power Corporation. Along with my colleagues on our panel, I would like to thank you for the opportunity to appear before you today and commend you for holding this hearing on what I believe is a matter of great importance to our customers and customers in New York State as a whole. I am speaking on behalf of Mr. John G. Haehl, Jr., Chairman of the Board of Directors and Chief Executive Officer of Niagara Mohawk Power Corporation, who could not be here today.

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*John H. Terry was elected Senior Vice President, General Counsel and Secretary of Niagara Mohawk Power Corporation in May, 1976, having previously been elected Vice President and Associate General Counsel in April, 1973 and Vice President, General Counsel and Secretary in January, 1976. A 1945 graduate of the University of Notre Dame and a 1948 graduate of the Syracuse University College of Law, Mr. Terry was a senior partner in the law firm of Smith, Sovik, Terry, Kendrick, McAuliffe & Schwarzer from 1948 - 1973. Mr. Terry served in the U.S. House of Representatives for the term which concluded on December 31, 1972, representing constituents in part of Onondaga County and in the Finger Lakes area. He was a Member of the Committee on Public Works and the Committee on Interior and Insular Affairs. Prior to his service in Congress, Mr. Terry was a New York State Assemblyman for eight years and served for two years as Assistant Secretary to Governor Nelson A. Rockefeller.

Niagara Mohawk is an energy company with diversified interests and resources committed to providing for the current and future needs of customers through economical products and services of superior quality. Niagara Mohawk serves an area encompassing more than half the land mass of New York State. Our electric system extends from Lake Erie to New England's borders, to Canada and Pennsylvania, and meets the diversified needs of nearly 1.4 million customers and 3,500,000 people who live in the 37 counties and 669 cities, towns and villages in which Niagara Mohawk provides electrical service.

Niagara Mohawk is dedicated to maintaining an efficient, progressive, cost-conscious organization that provides a fair and equitable return to its owners. Niagara Mohawk pursues opportunities to improve the economic climate and well-being of citizens, industry and business within the markets served. Appropriate actions are taken to meet socioeconomic responsibilities, including seeking necessary improvements in the regulatory and legislative environment that best serve interests of Niagara Mohawk's customers, employees, and owners. Niagara Mohawk takes an active role in the development of technologies and opportunities advantageous to customers and owners. It is dedicated to maintaining and developing dependable energy resources and delivery systems that are safe and environmentally sound. Niagara Mohawk actively pursues strategies in support of objectives to accomplish this mission. In light of our corporate mission, the subject matter before this Subcommittee, legislation concerning the relicensing of hydroelectric projects, is of vital importance to Niagara Mohawk's consumers and consumers in New York State as a whole.

Investor-owned utilities serve 98% of the electric customers in New York State. The total population served by New York State's investor-owned utilities is approximately 18,000,000 people whereas municipal systems within the state serve about 350,000 people. Reference should be made to the graphs set forth in Attachment 1 to gain a graphic understanding of the overall hydroelectric capacity and generation picture in New York State. In terms of hard data, conventional hydro is expected to account for 4,012 MW of generation in New York State in 1985 (c.f. Attachment 2) or about 13% of the total generating capacity of the state. Of this figure, only 803 MW's of conventional hydroelectric capacity are owned and operated by the investor-owned utilities in the state (c.f. Attachment 3). 3,206 MW, or 85% of New York State's conventional hydroelectric capacity, is owned and operated by the New York Power Authority, a public authority of the State of New York (c.f. Attachment 3). In 1984, while conventional hydro generation of 27,750 GWH accounted for over 22% of the generation in New York State (c.f. Attachment 3), the 3,882 GWH of conventional hydroelectric generation from investor-owned utility facilities represented only 14% of the hydro generation in the state and just over 3% of the overall generation in the state (c.f. Attachments 3 and 4).

On Niagara Mohawk's system, our 695 MW of hydroelectric generating capacity represents 9% of Niagara Mohawk's total generating capacity (c.f. Attachment 5). As with capacity, the electricity generated from Niagara Mohawk's 80 or so hydroelectric plants amounted to 9% of the energy generated or purchased by Niagara Mohawk in 1984.

Hydroelectric power generation has a long, glorious and storied tradition in upstate New York. Hydroelectric power came to the northeastern United States well before the twentieth century was born. The first builders of hydroelectric facilities were industries and predecessor utilities to today's investor-owned utilities. These hydroelectric pioneers served industries or communities in the immediate vicinity of the hydroelectric project.

The evolution of hydroelectric power to drive machines and to heat and light homes and factories began long before the twentieth century. In New York State, as early as 1923 the Oswego Canal Company, a predecessor of Niagara Mohawk, had acquired land from Alexander Hamilton and others. Its purpose was to use the waters of upstate New York's Oswego River for mechanical power. For the first 50 years of its existence, the canal company sold water which was used to drive turbines, and these were directly connected to machinery in the mills along the Oswego River.

Around 1888, the waters of the Oswego River were used to generate hydroelectricity in addition to supplying mechanical power. As technology developed, the use of Oswego River waters -- and indeed all the rivers of the Northeast region -- gradually shifted to using those waters to generate hydroelectricity.

Since that time, electric utilities have grown and merged in order to take advantage of the Northeast's considerable economy of scale. New York State's electric utility industry, as we know it today, is the result of the natural growth of the industry operating within the framework of federal and state regulation. Today, Niagara Mohawk integrated generating, transmission and distribution systems are the end product of over 500 companies, which have evolved into Niagara Mohawk over 150 years of corporate history.

Niagara Mohawk is desirous of continuing its long, glorious and storied tradition of hydroelectric power generation in the public interest. The continued operation of existing hydroelectric projects by the New York's investor-owned utilities is in the public interest for the following reasons.

1. New York State's Investor-Owned Utilities Bring the Benefits of Hydroelectric Generation to Over 6.4 Million Customers, Which Translates to Over 18 Million People.

Over 6,438,000 customers -- and this translates to over 18 million people -- enjoy the benefits of New York State's investor-owned utility hydroelectric plants. Municipal utilities in the New York State region serve about 137,000 customers and a population of approximately 350,000 people.

If a preference is accorded municipalities in the relicensing of hydroelectric facilities, municipal utilities could take over the region's investor-owned utility hydroelectric projects. Such a takeover would have this immediate effect: 18 million individuals who currently enjoy the benefits of New York State's investor-owned utilities' relatively inexpensive hydroelectric power would suddenly lose these benefits to the people served by municipal utilities. These municipal utilities presently serve about 2% of the customers presently served by the electric utility industry in New York State.

2. Hydroelectric Power Generated by the New York State's Investor-Owned Utilities Saves the Customers of These Utilities Millions of Dollars Annually in Fuel Costs.

Municipal takeover of the New York State's investor-owned hydro projects would result in increased electric rates, since hydroelectric power from existing projects is generally among the least expensive form of power to generate.

The Northeast's investor-owned utilities' hydroelectric projects with licenses that expire before 1994 produce approximately 1,600,000 megawatt hours of electricity annually. If these projects are taken over by municipalities, ratepayers of the utilities would, according to a New York State Department of Public Service estimate, have to pay 91 million dollars more in fuel costs to replace the lost generation with more expensive fuels, such as oil, coal, gas or nuclear. This amount would increase as the price of fuel increased.

Hydroelectric power, since it uses a renewable resource, is essentially a no-cost fuel. For the most part, the cost of fuel is passed on dollar-for-dollar to investor-owned utility customers in New York State; the utility makes no money on its fuel purchases. A municipal takeover of investor-owned hydro projects, therefore, would have its greatest impact, not on the utilities, but on the customers whose electric rates would increase because of the need to supplant an essentially zero cost fuel with more expensive fuels subject to annual cost increases and inflationary pressures.

Moreover, increased costs to the utility customers would not stop at fuel replacement costs. Over time, there would also be the high cost of building or purchasing new generating facilities needed to replace the hydroelectric units and to reestablish the generating and transmission system.

To replace the 380 MW of hydroelectric generating capacity of the New York's investor-owned utilities that are at risk due to expiration of initial hydro project licenses would cost the utilities' customers hundreds of millions, if not billions, of dollars.

3. A Number of Municipal Utilities in the Northeast Already Receive Substantial Amounts of Inexpensive Hydroelectric Power.

The electric power needs of New York State far exceed available hydroelectric power resources in the area. Consequently, most of the area's electric power needs must be met through the use of more expensive thermal (coal, oil or natural gas) generation. To deprive investor-owned utility customers in New York State of the hydroelectric generating resources now available to them would force the utilities to use more expensive thermal generation in order to meet the needs of their many millions of customers. The increased fuel costs would, of course, be reflected in consumers' electric bills.

Many of the municipalities in New York State already receive large amounts of government-owned hydropower. In New York State, municipal utilities receive hydroelectric power produced at the New York Power Authority's (NYPA) Niagara and St. Lawrence Power Projects. These immense projects, totalling in excess of 3,000 MW of capacity, were financed by bonds, the issuance of which was made possible when several investor-owned utilities in New York State agreed to purchase power from the NYPA projects. Yet, the benefits of this inexpensive hydropower flow disproportionately to the small number of taxpayers who receive electric service from municipalities.

Municipal systems receive 547 MW of capacity from NYPA's St. Lawrence and Niagara Projects. Yet these municipal systems serve only 2% of the state's residential customers. Now, these municipalities may lay a preferential claim not only to taxpayer supported hydro but also to the hydroelectricity generated at projects built, paid for and developed by investor-owned utilities.

4. New York State's Investor-Owned Utilities Contribute Significantly to the Local Tax Base.

Investor-owned utilities in New York State pay millions of dollars per year in taxes on their hydro projects. For instance, any improvements made by the utilities in their hydroelectric facilities are generally taxable by the municipalities in which the facilities are located. Hydroelectric improvements made by a municipality are not.

Similarly, the amount which utilities pay in taxes to the villages, towns and counties in which they have facilities is predictable, dependable and therefore relied upon in developing budgets. If municipalities take over investor-owned hydro projects, they need not pay taxes on those projects after the time of takeover.

In New York, Niagara Mohawk paid over $21 million in taxes between (1977 and 1981) for the projects with licenses that expire before 1994.

Removal of hydro projects from tax rolls could have other serious consequences. For example, Niagara Mohawk facilities account for 72% of the assessed value in the Town of Colton, 74% in the Town of Parishville, 88% in the Town of Orwell and 43% in the Town of Pierrepont. Loss of such significant portions of the tax base would impose severe revenue and taxing constraints on town and school budgets.

5. The Northeast's Investor-Owned Utilities Have Built An Efficiently Integrated Hydroelectric System.

In developing the rivers of New York State, the investor-owned utilities have pioneered the coordination of hydroelectric projects. The result has been the achievement of maximum efficiency in both the use of the region's water resources and the utilities' own electric systems.

The utilities have created on many rivers what is described as a "stairway of power." In a stairway of power, use of water for hydroelectric power starts upstream, perhaps at a storage reservoir. As the water flows down the river, it is used repeatedly through downstream powerhouses. The fourteen developments of Niagara Mohawk's four Raquette River projects are a perfect example of the stairway of power concept.

If municipalities succeed in their bid to takeover hydro projects up for relicensing, it is possible that the coordinated use and reuse of the waters of a river would end, disrupting the efficient and integrated use of the river's hydropower.

In addition to its use of stairways of power, hydroelectric generating facilities may also have associated storage capacity. This enables the facilities to economically provide one or more of the various services required to operate the large and integrated electric utility systems of New York State's investor-owned utilities.

The hydroelectric generator, for example, can be started quickly, produce energy rapidly and, by "turning the tap," respond immediately to changes in load demand. Such abilities make the hydroelectric generator efficiently and ideally suited for the provision of capacity services.

Capacity services are becoming, or have become, increasingly necessary and invaluable as more and more base load units are added and older ones retired on the systems of the region's investor-owned utilities. By economically providing one or more capacity services, the utilities' use of hydropower assists in obtaining maximum efficiency of their integrated electric system. A brief description of these capacity services follows.

Regulating Capacity

Regulating capacity is the available unloaded capacity that can respond automatically to small, instantaneous changes in load. Where sufficient storage is unavailable, this additional capacity is provided by operating one or more units at less than optimum full load. Requirements for this service typically range from 1-3% of daily peak system load.

Spinning Reserve Capacity

Spinning reserve capacity must be provided by equipment that is electrically synchronized to the system and that is capable of being loaded an additional amount within a matter of minutes. It can include the unloaded capacity of a generator already producing energy or the capacity of a unit operated as a synchronous condensor (i.e. running but not producing megawatts). Spinning reserve capacity includes the unloaded regulating capacity described above. The amount of spinning reserve capacity required is typically at least that of the largest unit operating on the system.

Operating Reserve Capacity

Operating reserve capacity requirements are provided by units which can be started and loaded within a relatively short period of time (typically 10 - 30 minutes). It must be available for conversion to spinning reserve to cover daily load estimating errors and contingencies such as the loss of a second large unit or the loss of major transmission facilities. The operating reserve capacity depends on the season, day of the week and time of day, and the size and number of large units in operation. These requirements may vary from 5 - 15% of the expected daily load.

Load Following Capability

Every electrical system experiences daily peaks and valleys in meeting customer demands. The required amount of load following capability will depend on a utility's daily load shape and the effectiveness of its load management program. Load swings of 40-50%, which are not uncommon, require that more than 50% of a system's capacity be in a form capable of varying its ability to match customer demands.

In the current relicensing competition between New York State's investor-owned utilities and municipalities, the loss of the utilities' hydroelectric projects would seriously impair their ability to efficiently and economically meet their customers' peak load requirements by diminishing the ability of the utility to utilize its hydroelectric generation for the aforementioned capacity services.

6. The Customers of the Northeast's Investor-Owned Utilities Better Conserve and Utilize the Benefits of Hydropower.

The customers of municipalities with hydropower pay much less for their electricity -- and they use much more -- than do the customers of investor-owned utilities. The relationship between low cost and high use of electricity has been tracked in New York State. Attachments 6 and 7 graphically demonstrate the relationship between the use and price of electricity in New York State during the period 1960-1980.

The data in Attachments 6 and 7 suggest trends that clearly do not enhance the goal of energy conservation. The data clearly demonstrates that municipal system access, to cheap hydroelectric power generated by the New York Power Authority has resulted in increased usage in comparison to other electric consumers in New York State.

7. New York State's Investor-Owned Utilities Have Proven Their Ability to Provide Reliable Electric Service for 50 to 75 Years.

In the past 50-75 years, New York State's investor-owned utilities have built, operated and maintained hydroelectric and other electric generating facilities. They have continuously demonstrated their ability to supply efficient, reliable and dependable electric service to their ever-growing number of customers.

Municipal utilities that could seek to take over the hydroelectric projects of the region's investor-owned utilities generally have no proven record of operating or maintaining hydro or any other electric generating facilities. The issue between the investor-owned utilities and their municipal competitors thus becomes one of proven performance versus promises.

Niagara Mohawk and the six other investor-owned utilities in New York State strongly support S. 426, the Electric Consumers Protection Act of 1985. This is a pro-consumer bill which provides an effective means of protecting the New York State electric consumers that presently receive the benefits of power generated from hydroelectric projects licensed to investor-owned electric utilities in New York State. This legislation amends the Federal Power Act to provide that any existing hydroelectric project licensee shall receive a new license if their projects have been and will continue to be operated in the public interest as determined by the Federal Energy Regulatory Commission (FERC). S. 426 does not call for any substantial change in existing law. It simply clarifies the intent of Congress regarding the issue of whether a municipal preference applies when the FERC relicenses hydroelectric facilities.

In addition, S. 426 provides that in the event a new licensee is awarded an existing project, the previous licensee shall receive just compensation as determined by the FERC in accordance with due process of law. This standard, as opposed to the present standard of net investment plus severance damage, is necessary in order to provide the existing licensee and its customers with full compensation for the loss of the future benefits of hydroelectric power generation.

In essence, S. 426 involves questions of fairness and equity. The public interest is best served by providing that any existing hydroelectric project licensee will receive a new license if the project has been and will continue to be operated in the public interest. By clarifying the procedures for the relicensing of hydroelectric projects, S. 425, more than any other bill presently before the Subcommittee, will accomplish that goal and thus permit existing project licensees, be they utilities, municipalities or industry, to plan effectively and economically to meet their future electric generation needs in upstate New York.

The simple yet comprehensive treatment of both the standard for relicensing existing licensed hydroelectric projects and the compensation issue is what separates S. 426 from the three other bills before the Subcommittee. Each of the two facets embodied in S. 425 is important to include in the legislation to be passed by the Senate.

Incentives exist to compel others to attempt to wrest hydroelectric projects away from existing licensees in a relicensing process. On the national scene, Congress passed the Public Utility Regulatory Policies Act (PURPA) in 1978. Since then, in New York as elsewhere, there has been an influx of new developers, including a few municipalities, into the hydroelectric generating arena. The reasons are easy to understand. PURPA guaranteed qualifying hydroelectric developers a market for their energy (i.e. electric utilities) and a price (i.e. avoided cost) which was based not on the cost of development to the developer, but rather the cost of the most expensive generation on the purchasing electric utility system.

The Federal Power Act in its present form provides another powerful inducement to spur municipal interest in hydroelectric generation. The Federal Power Act provides that a licensee whose project is taken over in a relicensing proceeding is to be paid "net investment" plus "severence damages." Municipal utilities would interpret "net investment" to be the original cost of the plant less accrued depreciation.

Little relationship exists, however, between the cost of building the hydro plants in the 1920's and 1930's and the actual value of such plants today. Most hydro projects, built as many as 50 or more years ago, are in excellent condition. These plants can be expected to serve generations of people to come. Moreover, the value of these hydro projects, relative to other forms of electric generation, is now greater than ever.

As a measure of compensation, the Act's "net investment" standard bears no comparison with the traditional standard of payment that prevails in government condemnation proceedings. Condemnation, whether for a highway or other public purposes, requires "just compensation," "fair market value" or "putting the owner in as good a position as he would have occupied had his property not been taken."

The municipalities in competition with the utilities interpret the Federal Power Act to mean that neither the current cost of replacing hydro plants with other kinds of generating plants, nor the cost to ratepayers of thermal-generated replacement power requires compensation. Under the municipalities' interpretation, the utilities would not be paid "just compensation," the utilities' customers would not be in as good a position as if the municipalities had not taken over the project and municipalities would be the beneficiaries of a windfall.

Economics itself drives municipal interest. According to the Energy Information Administration's Hydroelectric Plant Construction Cost and Annual Production Expenses - 1981 publication, a sampled group consisting of some 370 reporting hydroelectric plants in the United States that had an installed capacity of ten megawatts or greater had operation and maintenance expenses (for non-Federal plants) of 2.92¢ per kilowatt hour. Niagara Mohawk's costs for operation and maintenance of its hydroelectric facilities are of a similar magnitude whereas the average cost of electricity sold to our customers in 1984 was on the order of 5.7¢ per kilowatt hour. It is no wonder that municipal interest in hydroelectric projects is at its zenith given the relatively inexpensive aspect of operation and maintenance cost component and the potential for a wide margin of profit available between production expenses and compensation for energy produced and sold.

Lastly, it goes without saying that municipal entities have traditionally enjoyed an advantage in financing project construction and/or acquisition because of the tax free aspect of their debt. That advantage has not remained status quo. Rather, it has been further strengthened de facto by PURPA's creation of a guaranteed market and a guaranteed price for the output of a qualifying state or municipal project.

Note should be made of the impending relicensing pressure which may be imposed by the influx of private developers into the hydroelectric generating arena as the result of PURPA's passage in 1978. The reasons are easy to understand. PURPA guaranteed hydroelectric developers a market for their energy (i.e. electric utilities) and a price (i.e. avoided cost) which was based not on the cost of development to the developer, but rather the cost of the most expensive generation on the purchasing electric utility system. Currently, New York State law requires Niagara Mohawk to pay qualifying small power producers 6¢/kwh or more in "front end loaded" contracts. In addition, current federal tax laws allow private developers to claim investment tax credits (ITC) in a single year and to depreciate the facility using a five year accelerated cost recovery system (ACRS).

In contrast, an electric utility does not have available to it many of these development incentives to the same extent as a PURPA-spawned developer. While markets for generated electricity are not generally a problem for an electric utility, project development economics are premised on recovering project costs from our customers through our filed tariffs. Those tariffs reflect the average cost of doing business rather than the avoided cost standard used, pursuant to federal and/or state law, to compensate private hydroelectric developers. For 1984, Niagara Mohawk's average revenues for electricity sold was between 5.6 - 5.7¢/kwh, a figure which is approximately 5% lower than the 6¢/kwh Niagara Mohawk must pay to qualifying PURPA developers. Result: competitive advantage to the PURPA-spawned small power producer.

An investor-owned utility is further handicapped by federal tax law provisions which deny hydroelectric plants the five year accelerated cost recovery system (ACRS) treatment available to the PURPA-spawned developer. Rather, utilities are required to depreciate the cost of a hydroelectric project over at least a fifteen year life. Similarly, as a matter of public utility commission policy, an electric utility may not be allowed to write off its investment tax credit (ITC) in one year. Rather, the ITC must be claimed or recovered over a longer period of time, perhaps as long as the life of the new facility. Result: competition advantage to the PURPA-spawned small power producers.

These diverse aspects of federal law and public utility commission policy result in electric utilities having a far lower margin or ceiling for the economic development of capital intensive hydroelectric projects than is the case for PURPA-spawned developers. Were the current situation to remain status quo, the PURPA-spawned private developer would become as serious of an adversary, if he is not already, as a municipality. Having a greater margin with which to work, either the municipality or the private developer may well be able to promise and deliver more in a relicensing proceeding in terms of capacity, energy, environmental and recreational amenities, not because of any unwillingness or lack of expertise or efficiency on the utility's part, but solely because of the dollar and cents considerations dictated by the disparate institutional and legal frameworks in which utilities must conduct their business as opposed to municipalities or PURPA-spawned developers. The end result, if the current institutional and legal framework persists, is to arbitrarily provide incremental incentives for hydroelectric development for other than the investor-owned utility section of the electric industry. Result: the utilities, who have for 50 - 75 years been the professionals in the business, may be voluntarily or involuntarily forced to relinquish their projects upon relicensing to "Johnny come lately" amateurs who are relying on tax provisions and other statutorily created incentives to make a profit where the economics just do not exist for utilities. For these reasons, the compensation provision of S. 426 is extremely important to Niagara Mohawk's customers as it would at least result in just compensation flowing to our customers in the event our projects are not relicensed.

I feel constrained also to address the argument that a municipal preference must exist in the relicensing context in order to spur competition and thus insure the best overall comprehensive development plan. Niagara Mohawk's experience has been to the contrary.

Green Island Project No. 13 is the only project for which Niagara Mohawk has received a new license. The new license was issued to Niagara Mohawk on February 7, 1977 pursuant to a new license application filed with the Federal Power Commission on March 2, 1970. The project, located at a Corps of Engineers dam on the Hudson River near the City of Troy, New York, was built by Henry Ford & Son, Inc. and placed in operation in 1923. Plant operation was discontinued in 1960 because Ford's energy requirements were such that it was more economical to purchase energy from Niagara Mohawk than to generate at the hydroelectric plant.

On June 27, 1967, the Federal Power Commission (FPC) authorized Niagara Mohawk's purchase of the project and the transfer of the license from Ford to Niagara Mohawk. By FPC order dated July 9, 1969, the FPC amended the Project No. 13 license, approving Niagara Mohawk's rehabilitation and plant modernization plans. Upon purchase, Ford's plant contained 4,000 KW of antiquated DC generation and 3200 KVA of AC generation (assuming an 80% power factor, the 3,200 KVA of AC generation would equate to approximately 2,560 KW). Niagara Mohawk's rehabilitation of the plant resulted in retirement of the antiquated DC equipment and the upgrading of the AC units from approximately 2,560 KW to 6,000 KW. Thereafter, Niagara Mohawk made application to the Federal Power Commission for relicensure of the project, the new license for which was eventually received in 1977. In summary, capacity was upgraded at Green Island Project No. 13 during the term of the initial license and subsequently the project was relicensed as rehabilitated and modernized. Competition played no part in this redevelopment.

In 1977, Niagara Mohawk announced an ambitious hydroelectric development program. The hydroelectric development plans of Niagara Mohawk were motivated by the evolving economic attractiveness of certain hydroelectric generation as the result of the oil crisis of 1973. Competition from municipal or PURPA-spawned developers played no part in the program, nor did energy tax credits or the investment tax credit. The phased 205 MW development program represented an effort by Niagara Mohawk to increase its hydroelectric generating capability by 30%. The 10 MW Granby Project situated on the Oswego River was the first project completed under the 1977 hydroelectric development program. In summary, as of 1977 Niagara Mohawk was moving to increase hydroelectric generating capacity by 30% solely because of the evolving dollar and cents attractiveness of adding hydroelectric generating capability in comparison to other forms of capacity. Competition played no part in this program.

In terms of recreation, as of 1969 Niagara Mohawk moved to comprehensively address the recreational development potential of Niagara Mohawk's 80 hydroelectric developments. It did so, in response to a 1967 Federal Power

Commission (FPC) letter, via submittal of a Systemwide Recreation Plan. The plan submittal was developed by Niagara Mohawk in cooperation with the New York Conservation Department. The FPC approved this plan in 1975 as a framework for proceeding on a license-by-license basis. In summary, in the early 1970's, Niagara Mohawk responded to a FPC request and came forward with a comprehensive recreation plan proposal encompassing an assessment of all of its hydroelectric generating stations. Competition played no part in the submittal of the Systemwide Recreation Plan.

The prospect or reality of competition from PURPA-spawned developers has, since 1980, forced Niagara Mohawk's hand and basically made a planning shambles out of the hydroelectric development program announced in 1977. As a general observation, insofar as Niagara Mohawk is concerned, competition has not had a positive effect at all. Competition has taken an orderly hydroelectric development program and turned it on its ear. Priorities and site development plans have had to be shuffled. In some instances, i.e. Mechanicville, Varick, High Dam, Minetto, Fulton and Oswego Falls West, the actuality of PURPA-spawned developer competition has forced or accelerated filings for new licenses for capacity additions. Just as true, however, is the fact that this competition has forced the downsizing of certain projects, i.e. the proposed Hudson Falls Project went from 60 MW to 36.1 MW, while the Fort Edward Project went from 10 MW to 0 MW. At best, Niagara Mohawk has no greater prospect for increased hydroelectric capacity as the result of competition. In fact, the converse is probably closer to the truth. That capacity may not necessarily be coming on line any quicker than originally planned either.

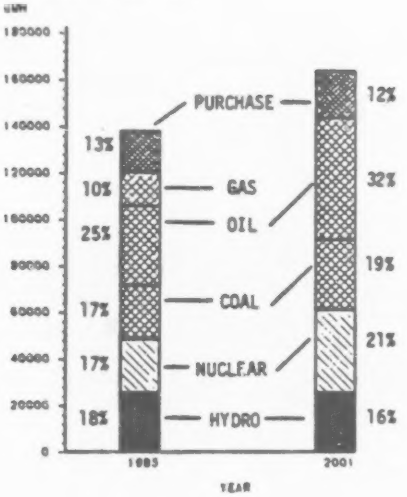
The competition for sites/capacity additon has staggered FERC, state fish and wildlife agencies and developers alike. Niagara Mohawk has several major relicense applications pending which have been pending acceptance before FERC since late 1981/early 1982. Only now is the acceptance log jam breaking. I would suspect that down the road, this would create a log jam of license issuances and the subsequent need to simultaneously construct/redevelop several different capital intensive projects across our 24,000 square mile service territory. In summary, the net result of competition has been the creation of a series of peaks and valleys in terms of manpower, scheduling and expense, as opposed to the levelized approach desired by Niagara Mohawk and advanced in our 1977 program.

In conclusion, during the course of last year's hearings before a House of Representatives Subcommittee on this subject, Mr. William T. Bagley rendered a statement on behalf of the National Association of Regulatory Utility Commissioners with regard to the public policy question of whether a preference should exist. In expressing his support for the House version of the Electric Consumers Protection Act, Mr. Bagley observed that never have so few tried to take so much from so many for so little. I agree with Mr. Bagley's statement.

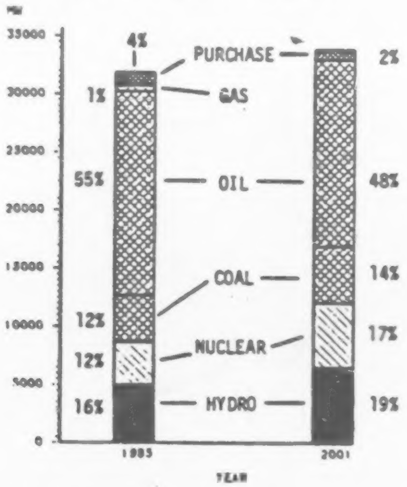
Congress should not enact yet another preference for a small class of consumers. Instead, Congress should promote fair competition for hydro electricity in order that it be spread equitably among as many consumers throughout the country as possible. Similarly, Congress should insure that existing licensees receive the Constitutional standard of just compensation in the event that a project is licensed to another. S. 426, the Electric Consumers Protection Act, would do just that and, therefore, I would urge its enactment on behalf of the 3,500,000 people in our service territory and the 18,000,000 people of the Empire State who receive the benefits of investor-owned utility hydroelectric power.

ATTACHMENT 1

NYPP ENERGY GENERATION MIX 1985, 2001



NYPP INSTALLED GENERATING CAPACITY MIX 1985, 2001



Source: A Report of The Planning Committee of
The New York Power Pool, Long Range Plan:
Electric Supply & Demand 1985 - 2001.
April 1985

PLANNED SYSTEM GENERATING CAPACITY ATTACHMENT 2

NYPP LOAD AND CAPACITY SCHEDULES – Generation Mix

SUMMER

MAXIMUM INSTALLED NET CAP.	1985
OIL FIRED	14532
COAL FIRED	3989
OTHER	0
GAS TURBINES	3483
DIESELS	60
NUCLEAR	3692
HYDRO(CONV.)	4012
HYDRO(P.S.)	1000
TOTAL CAP.	30768
PURCHASES	1200
SALES	171
ALL SOURCES	31797
PEAK LOAD	22530
MARGIN	9267
MARGIN-%	41.1

WINTER

MAXIMUM INSTALLED NET CAP.	1985
OIL FIRED	14636
COAL FIRED	3989
OTHER	6
GAS TURBINES	4388
DIESELS	60
NUCLEAR	4516
HYDRO(CONV.)	4018
HYDRO(P.S.)	1000
TOTAL CAP.	32613
PURCHASES	400
SALES	171
ALL SOURCES	32842
PEAK LOAD	20690
MARGIN	12152
MARGIN-%	58.7

Source: A Report of The Planning Committee of
The New York Power Pool, Long Range Plan:
Electric Supply & Demand 1985 - 2001.
April 1985

FUEL REQUIREMENTS - HISTORICAL - Conventional Hydro

	CONVENTIONAL HYDRO				
	1980	1981	1982	1983	1984
Installed Gen. Cap. (MW)					
New York Power Pool	4020	3937	3977	4006	4007
Central Hudson	43	43	43	44	44
Con Edison	-	-	-	-	-
LILCO	-	-	-	-	-
NYSEG	38	38	38	53	60
Niagara Mohawk	636	573	600	618	618
Orange & Rockland	34	34	34	34	34
RG&E	47	47	47	47	47
NYPA	3200	3200	3203	3200	3206

Generation (GWH)					
New York Power Pool	27004	26526	26360	26734	27720
Central Hudson	105	68	116	132	131
Con Edison	-	-	-	-	-
LILCO	-	-	-	-	-
NYSEG	204	210	210	213	206
Niagara Mohawk	2513	3047	2900	2853	3143
Orange & Rockland	130	116	121	133	142
RG&E	179	223	210	200	218
NYPA	23873	22842	23011	23399	23860

Source: A Report of The Planning Committee of The New York Power Pool, Long Range Plan: Electric Supply & Demand 1985 - 2001. April 1985

ATTACHMENT 4

FUEL REQUIREMENTS

Generation (GWH) (1)(2)(4)					
Residual Oil	36693	36307	32519	33913	28500
Distillate Oil	181	246	130	114	213
Coal	19000	19503	20673	20606	21707
Natural Gas	11572	12195	14145	12659	15677
Nuclear	19277	17946	14357	16311	21196
Conventional Hydro	27004	26336	26360	26914	27730
Pumped Storage Load				-2613	-3160
Hydro Output				1753	2116
Solid Waste				-	-
Purchases				20296	21335
Sales				-8500	-10999
TOTAL NYPP				121609	124330

NOTES

1. For years 1985 through 2001, fuel requirements and energy estimates are based on a Pool-wide dispatch. Practical considerations such as area security requirements, transmission losses and limitations and day-to-day load uncertainty may cause actual Pool Dispatch to deviate from that represented in this table.

2. Fuel requirements are only for electric generation and do not include requirements for steam heating customers.

3. There is expected to be a limited future use of natural gas as a boiler fuel for unit startup and whenever limited excess quantities are available from the gas system.

4. Based on median hydro conditions.

5. Generated energy figures are from coal firing with a small contribution from distillate oil used for fuel stabilization and startup.

Source: A Report of The Planning Committee of
The New York Power Pool, Long Range Plan:
Electric Supply & Demand 1985 - 2001.
April 1985

ELECTRIC AND GAS STATISTICS

NIAGARA MOHAWK

ATTACHMENT 5

ELECTRIC CAPABILITY

At January 1,	1985	%	1984	1983
	Thousands of kilowatts			
Thermal:				
Coal fuel				
Huntley, Niagara River	715	9	715	705
Dunkirk, Lake Erie	555	7	550	540
Total coal fuel	1,270	16	1,265	1,245
Residual oil fuel				
Albany, Hudson River**	400	5	400	400
Oswego, Lake Ontario	1,736	23	1,736	1,723
Roseton, Hudson River	300	4	300	300
Middle distillate oil fuel				
20 Combustion turbine and diesel units	310	4	310	310
Total oil fuel	2,746	36	2,746	2,733
Nuclear fuel				
Nine Mile Point, Lake Ontario	610	8	610	610
Purchased — firm contract Power Authority — FitzPatrick, Lake Ontario	138	2	139	118
Total nuclear fuel	748	10	749	728
Total thermal sources	4,764	62	4,760	4,706
Hydro:				
* Owned and leased hydro stations (83)	695	9	695	685
Purchased — firm contracts				
Power Authority — Niagara River	1,118	15	1,118	1,122
Power Authority — St. Lawrence River	115	1	115	115
Power Authority — Blenheim-Gilboa Pumped Storage Plant	550	7	550	550
Other	63	1	63	64
Total hydro sources	2,541	33	2,541	2,536
Other purchases	400	5	400	400
Total capability*	7,705	100	7,701	7,642

	1984	1983	1982
Electric peak load during year	5,826	5,625	5,512

*Available capability can be increased during heavy load periods by purchases from neighboring interconnected systems. Hydro station capability is based on average December stream-flow conditions.

**Has capability to burn natural gas (as well as oil) as a fuel.

ELECTRICITY GENERATED AND PURCHASED

	1984	%	1983	%	1982	%
	Millions of kw-hrs					
Thermal:						
Generated						
Coal	7,863	20	7,873	21	7,897	22
Oil	3,754	9	4,313	11	4,892	14
Nuclear	3,635	9	2,802	7	1,135	3
Natural gas	2,103	5	1,839	5	1,999	6
Purchased — Nuclear from Power Authority	878	2	790	2	768	2
Total thermal	18,233	45	17,617	46	16,691	47
Hydro:						
* Generated	3,803	9	3,527	9	3,575	10
Purchased from Power Authority	8,312	21	7,587	20	8,000	22
Total hydro	12,115	30	11,114	29	11,575	32
Other purchased power — various sources	10,240	25	9,621	25	7,621	21
Total generated and purchased	40,588	100	38,352	100	35,887	100

ELECTRIC STATISTICS

	1984	1983	1982
Electric sales *(Millions of kw-hrs.)*			
Residential	8,944	8,578	8,475
Commercial	9,739	9,387	9,330
Industrial	11,194	10,860	10,366
Municipal service	245	251	257
Other electric systems	6,964	5,656	4,212
	37,086	34,732	32,640
Electric revenues *(Thousands of dollars)*			
Residential	$ 607,527	$ 583,645	$ 539,317
Commercial	674,929	656,960	628,601
Industrial	438,920	441,219	425,331
Municipal service	37,845	38,466	34,907
Other electric systems	303,968	235,257	171,597
Miscellaneous	71,280	68,181	60,896
	$2,134,470	$2,023,728	$1,860,649
Electric customers *(Average)*			
Residential	1,258,777	1,245,590	1,232,164
Commercial	133,234	131,803	130,872
Industrial	2,822	2,594	2,686
Other	3,279	3,257	3,260
	1,398,112	1,383,244	1,368,982
Residential *(Average)*			
Annual kw-hr. use per customer	7,104	6,887	6,878
Cost to customer per kw-hr.	6.79¢	6.80¢	6.36¢
Annual revenue per customer	$482.52	$468.57	$437.70

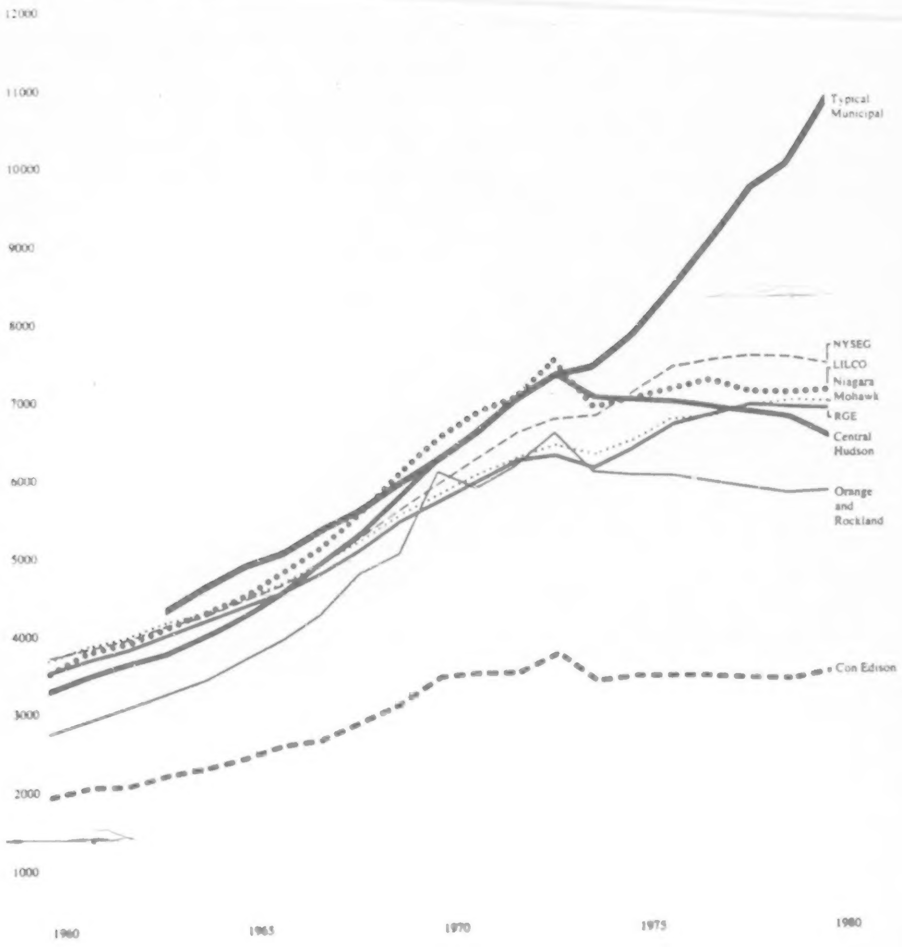
GAS STATISTICS

	1984	1983	1982
Gas sales *(Thousands of dekatherms)*			
Residential	49,519	46,865	51,019
Commercial	27,892	26,921	28,672
Industrial	32,755	25,736	26,026
Other gas systems	4,794	3,631	3,976
	114,960	103,153	109,693
Gas revenues *(Thousands of dollars)*			
Residential	$313,536	$304,157	$264,747
Commercial	157,469	155,858	137,105
Industrial	158,307	129,056	112,582
Other gas systems	16,708	15,783	15,418
Miscellaneous	4,056	3,733	3,270
	$651,076	$608,587	$533,122
Gas customers *(Average)*			
Residential	400,878	398,597	396,729
Commercial	32,106	31,697	31,188
Industrial	502	524	534
Other	2	2	2
	433,488	430,820	428,453
Residential *(Average)*			
Annual dekatherm use per customer	123.5	117.6	128.6
Cost to customer per dekatherm	$6.33	$6.49	$5.19
Annual revenue per customer	$782.12	$763.07	$667.32
Maximum day gas sendout *(dekatherms)*	772,994	754,061	832,307

Source: Niagara Mohawk Power Corporation, 1984 Annual Report

ATTACHMENT 6

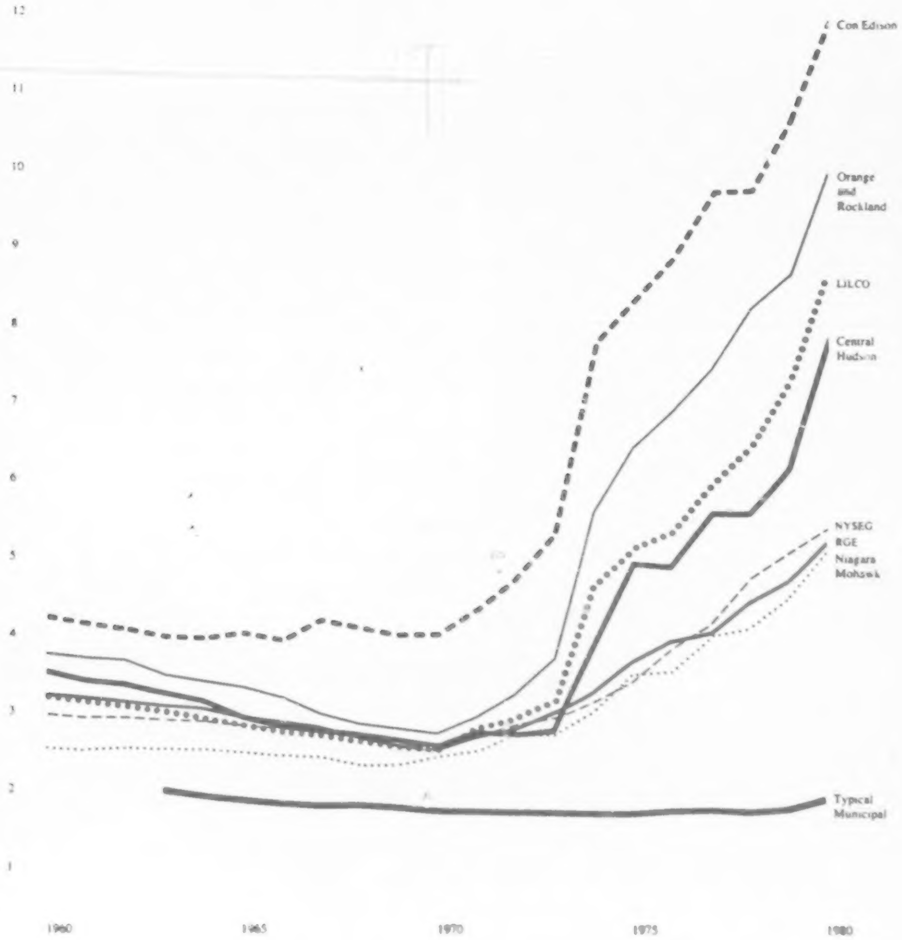
Residential Use of Electricity in New York State, 1960-1980
(Kilowatt hours per year per customer)



Source: A Report to the Governor and the Legislature of the State of New York from the Chairman of the Power Authority: Allocation of Hydroelectric Power, July 1981.

ATTACHMENT 7

Residential Price of Electricity in New York State, 1960-1980
(Kilowatt hours per year per customer)



Source: A Report to the Governor and the Legislature of the State of New York from the Chairman of the Power Authority: Allocation of Hydroelectric Power, July 1981.

Mr. **Mielke**. Mr. Chairman, as a matter of procedure perhaps I probably should have asked officially for my 19-page statement to be submitted in the record. I paraphrased it in a short oral statement.

Senator **Evans**. All of the full statements of the panel will be included in the record in their entirety.

Mr. **Mielke**. Thank you.

Senator **Evans**. Thank you very much, to all of you.

Let me start with Mr. Mielke with the same question I had earlier. I will warn the next panel, representing public power, that I am going to ask them the same question. If water indeed is a public resource and as such a resource available to all people of the Nation, should we engage in practices that in essence give substantial preference, if you will, on relicensing to the existing licenseholder, and in doing so maintain the benefits of that water resource to some citizens, but not to all?

Mr. **Mielke**. I was interested when you were asking that question of the other witnesses. I think, Senator Evans, you really are addressing yourself to the wrong issue. Sure, water is a public resource. The air is a public resource. The sun is a public resource.

Power can be extracted from all those resources. The point is, it takes a facility to extract the power. It is worth nothing unless you have the facility, the point being that a facility has been built. Money was invested, risks were taken. It was built for a group of customers, whom it has served well, and that group of customers has paid for that facility in their rates.

So the question is, should that group of consumers—is there any reason—or what solid Federal reason should there be to then take that facility away and give it to another group of customers only because the other group of customers is served by a municipal entity?

I think that's the issue, and I think it answers itself once the question is put.

Senator **Evans**. It seems to me that water is a different resource however than either air or sun, as you point out, which is not as discretely confined, nor is it legally as established a public resource as I think water is.

Mr. **Mielke**. Wind power is found only in special localities where the wind blows adequately enough to justify the investment, too. The same is true of the sun. You need almost a desert area where there's sun all the time and inexpensive land. So those resources are limited also. But I don't think that helps the analysis in my view, Senator Evans.

Senator **Evans**. Do you think, however, since we are talking about licensing, obviously there must be some sense of Federal ownership; otherwise we wouldn't be licensing the project, or public ownership?

Mr. **Mielke**. Bear in mind that the water itself, any licensed facility does not pay for the water itself. The payment involved, the cost involved is the development of the facility to extract the energy.

Senator **Evans**. You anticipated my next question. Should there be a charge under relicensing? Should we charge for the water?

Mr. **Mielke**. I think that's again up to Federal policy, whether the policymakers of this body, the Congress, wishes to exact the highest price it might for hydroelectric power. That has been proposed. The Grace Commission I understand proposed selling federally produced power at market value. That's a policy decision. That's independent I think of what we're facing here. We're talking here about relicensing and whether one group of consumers should be substituted for another group of consumers.

Senator **Evans**. The public interest test in section 10(a) of the existing act requires that a comprehensive—that there be a comprehensive plan and the project must be the best adapted. Should we clarify or change that language in 10(a), considering the fact that there are no—as far as I'm aware—no established comprehensive plans?

Mr. Sousa talked about sort of the ad hocery of FERC in their application procedure and the development of a plan, but it seems to me that that is now subject to litigation in the *Salmon River* case.

What is your opinion?

Mr. **Mielke**. My own view is that a general standard, such as exists in 10(a), is adequate for the purpose. There is a large body of past cases and a pretty good understanding as to how the FERC proceeds in these matters. I don't see personally any need to try to embellish that standard with any more specific provisions. I think it is quite adequate to do the job.

Senator **Evans**. What's your analysis then of what the term "comprehensive plan" really means?

Mr. **Mielke**. You notice, it says "comprehensive plan," also "utilization of the facility." There's a lot of language in there that uses the term "public interest." It is repeated elsewhere in the act.

I don't think there is any real problem in leaving to the FERC the general command to do what is best in the public interest insofar as making sure the hydro facilities are well developed so we have good hydro facilities, and that the benefits are properly dispersed to the citizens of this Nation.

Senator **Evans**. Senator Johnston.

Senator **Johnston**. Thank you, Mr. Chairman.

Mr. Mielke, I know you're a lawyer and a good one, and I am here concerned about the language which is used in S. 426. Now on a couple of occasions here before the table, I think most recently by Mr. Terry, you've referred to this term of "just compensation" as encompassing, I think you put it, constitutional guarantees of due process. Do you accept that?

Mr. **Mielke**. Yes, and I think when the municipalities came and got the law changed in 1953 what they really did is knock out the provisions of the Federal Power Act that had a different measure, so that all that is left is the just compensation under the constitutional standard.

Senator **Johnston**. That's what you mean on S. 426?

Mr. **Mielke**. Yes.

Senator **Johnston**. Under section 14(a) of the Power Act as it presently exists, it defines really what your present interest is in those dams, and it says that you'll get net investment not to exceed fair value, plus severance damages, and not including goodwill, going value, or prospective revenues. That defines what you are presently entitled to.

Mr. MIELKE. Yes, under section 14(a); right.

Senator JOHNSTON. And it was on that basis that I think they alluded to the fact in *Merwin* that it's only worth $9.5 million and really worth, if you could operate it as a dam, $730 million. And I quite agree that that shouldn't be.

I don't quarrel with what you are trying to do. My quarrel is with what you would do if you passed 426. Is 426, in your judgment, is that constitutional—excuse me. Is the present act, section 14(a), is that constitutional?

Mr. MIELKE. I have never addressed that question.

Senator JOHNSTON. You didn't attack it as being unconstitutional?

Mr. MIELKE. I have assumed it is. Now that you raise the question, perhaps it is not, because it is taking property without using the constitutional standard.

Senator JOHNSTON. But you didn't attack that in the *Merwin* case? It wasn't attacked in the *Merwin* case as being——

Mr. MIELKE. No.

Senator JOHNSTON. Then isn't it very plain that if section 14 defines what you own, and that in turn is constitutional, that if all you're asking in 426 is just compensation in accordance with the Constitution, that's all you get? Isn't that what you've said?

Mr. MIELKE. I would take issue with you when you say section 14(a) defines what we own. It doesn't. It says what we get paid if we lose the license. What we own is the facility we built, which is a hydroelectric facility, dams, canals, and transmission lines, that are all parts of the project, hardware, which is usable. That's what we own.

Senator JOHNSTON. Suppose we amended this law to say you could either have the dollars as provided in section 14(a) or you only take your dam back as long as you clean up the site when it's over with. Would that be constitutional?

Mr. MIELKE. It would be a greater burden to have to take the dam and tear it down and to tear down the facilities. That would be a greater burden, if I am seeing your question.

Senator JOHNSTON. That's exactly right. So all you own here is what 14(a) gives you.

Mr. MIELKE. I don't agree with that.

Senator JOHNSTON. What more do you own?

Mr. MIELKE. Many of these powerplants, bear in mind, are built on land we own. We own the land, we own the facility. We just can't use the water unless the Federal Government tells us we can.

Senator JOHNSTON. You're entitled to the value of that land under section 14(a).

Mr. MIELKE. It's our land.

Senator JOHNSTON. Right; you're entitled to that.

Mr. MIELKE. If we got the license, you might even arrange the lease of it, I just don't know. But the point is the license pertains to the use of the Federal water.

Senator JOHNSTON. That's right.

Mr. MIELKE. That's where we're missing the point. The facility itself has a value.

Senator **Johnston**. The point I'm trying to make to you is that the concept you're trying to get is that you want to get paid for the value of that dam, which includes the right to have a license.

Mr. **Mielke**. No, not necessarily. It is a broad standard. It's just compensation.

Senator **Johnston**. But it has no value other than that.

Mr. **Mielke**. You're drawing legal niceties that I don't think are involved here.

Senator **Johnston**. Oh, it's not a nicety.

Mr. **Mielke**. I don't think they're accurate.

Mr. **Vogtle**. Senator, the project is going to continue to be operated. It doesn't lose value just because the license is expiring.

Senator **Johnston**. Oh, it doesn't?

Mr. **Vogtle**. No, sir; because it's not going to be torn down. It's not going to be moved away from the stream. It's going to be operated, either by the existing——

Senator **Johnston**. You might give it to somebody else.

Mr. **Vogtle**. It could be, and if it is then we ought to receive just compensation, which is based on value.

Senator **Johnston**. What should you be entitled to?

Mr. **Vogtle**. Well, I would say replacement cost, or reproduction cost. It's a value, a concept that connects to my understanding of just compensation.

Senator **Johnston**. Well, you see just compensation deals with the property you own.

Mr. **Vogtle**. Yes, sir.

Senator **Johnston**. There have been—there are a lot of cases I remember from my days of practicing law where the highway department would come along and would condemn a lease. I remember a laundry in my hometown of Shreveport. They condemned that just months before the lease was going to expire and they said the man wasn't entitled to anything because all he owned was the residual time left on the lease, plus whatever interest in any personal property he had.

I think what you're trying to do is you're trying to get that, and you haven't said it. And if you mean to say it you ought to say it, because I can tell you——

Mr. **Mielke**. Reproduction cost new, say, or some such value?

Senator **Johnston**. Whatever it is you're trying to get in terms of value, you haven't said it. You've adopted a standard of just compensation under the fifth amendment, which is due process. That only gives you what you own, and all you own is the brick and mortar and the piece of property, which without the license is not worth very much.

And that is precisely what section 14(a) describes. They've done a fairly good job in section 14(a) of describing that.

Now let me——

Mr. **Mielke**. Senator Johnston, if your concern is the vagueness of the standard, the constitutional standard, there are other measures which could be established there. That constitutional standard, the eminent domain standard, is normally taken to mean market value if you have a market.

Where you do not have a ready market, it often is taken to be——

Senator JOHNSTON. I take it that it's the market value of what—it's the market value of what you own. You don't own anything here except the bricks and mortar.

Mr. MIELKE. That's right——

Senator JOHNSTON. You're trying to extract——

Mr. MIELKE [continuing]. But the bricks and mortar have a tremendous value, because if you had to reproduce them at today's prices to extract that energy it's tremendously valuable.

To put it another way, look at it from the other viewpoint: the one who gets it. It's tremendously valuable to that person.

Senator JOHNSTON. Of course it is.

Mr. MIELKE. That person would want to pay a huge price to get it.

Senator JOHNSTON. I don't think you understand the point. The point is not that it's valuable. I understand that the Merwin dam is worth $730 million if you can operate a dam with it. Of course that's clear.

Mr. MIELKE. If you priced out building the Merwin dam project, it might be less than the cost of building the substitute coal-fired plant. That's what the $730 million was. The point is, that could be priced out on a reproduction——

Senator JOHNSTON. I understand that point. But you want to get away from the present law which you say is vague. My goodness, I've never seen——

Mr. MIELKE. The present law is too precise. [Laughter.]

It says the net investment and that's a pittance. Even the American Public Power Association, who sponsored the Matsui bill over in the House, recognizes the inequity and they have allowed us some additional compensation because they understand the net investment is unfair. They came to Congress in 1953 because they know it's unfair. Everybody knows it's unfair.

Senator JOHNSTON. If you want something more than net investment——

Mr. MIELKE. Absolutely.

Senator JOHNSTON [continuing]. Then you better say so in your bill, because I don't think you've said so. By the way, while we're at it, section 10(a) it seems to me is a model of vagueness. You say it includes the public interest. I don't think it says that at all.

I think it says best adapted—and by the way, you agree there's no preference there, don't you?

Mr. MIELKE. That's right.

Senator JOHNSTON. In S. 426?

All right, it says a comprehensive plan to do three things: To develop waterways for interstate or foreign commerce. Basically, where it's an ongoing project there's very little that can be done for that. The waterways are already in place.

Water power development. I assume that means the maximum amount of electricity you can extract from this.

And the third thing is other beneficial public uses, including recreation.

So it looks to me like if a court were properly interpreting Section 10(a), they would probably reject the first two things because an existing facility can't improve on those, and your whole competition here would be based on other beneficial public uses, including recreational, and probably end up making the decision based on who would put in the most fish ladders.

Mr. MIELKE. I don't think you can generalize, Senator Johnston. Many of these projects now, you can justify extracting a lot more energy from them. You can build dams and store more water. You can line tunnels and make them more efficient, so you get more energy out. You can add new units to get greater capacity from the existing water.

And all of these become economic because prices of the alternative energy is coming up, fuel costs.

Senator JOHNSTON. I understand that.

Mr. MIELKE. So many of our projects are actually substantially adding to the hydroelectric project.

Senator JOHNSTON. My point here is that when Commissioner Sousa and others say that under section 10(a) the standard is broad, that FERC has unlimited ability to interpret that any way they want, I would say first of all, if he says that, he's certainly not a strict constructionist. I don't know what the court's going to do with it.

But the language doesn't say anything about the customers and whether customers are well served or not. It refers only to those things such as power development, and maybe one applicant can better develop power. Would you like to lose your license because another one can put in a little better generator? Overall maybe it's not in the public interest, but because they can put in a better generator or a better fish ladder you lose your license.

What I'm trying to say is that I think you need another series of tests, which I've tried to do in S. 403, which are not subsumed in section 10(a). They are not subsumed under the language of Section 10(a) as read literally. I invite you to reread that.

If you think one decision of FERC, which in turn is under appeal, is sufficient to set forth the body of jurisprudence that can be relied upon with clarity and with certainty, I would say you've got another thought coming. I think you had better put a test, whatever it should be, better put it in the law.

Mr. MIELKE. I see what you're driving at, Senator Johnston, and I commend you for your effort to clarify the situation. The question is whether it needs clarification. Senator Wallop's bill just deals with the present 10(a) standard. We have faced that standard for years and years. We've competed on applications for years and years.

Senator JOHNSTON. Not on relicensing.

Mr. MIELKE. We are quite content to compete on that standard against other competitors without preference. Now if you and Senator Wallop can get together and do a better job, I think there is something to be said for the additional clarification of measures to be used in assessing the public interest.

I do not have any objection whatever to the measures outlined in your bill as to how the FERC might assess where the public interest lies. I do think that Commissioner Sousa had a point when he would not like to be constrained as long as it is plain that he has the authority to use those particular considerations in addition to any which may be in 10(a). Then I think you could have perhaps an improvement.

Senator JOHNSTON. How anybody could read section 10(a) as being broader than the four tests in my bill, I do not know. Because 10(a) is fairly narrowly drawn, inartfully drawn I will admit, and perhaps ambiguously, but pretty narrowly. And I think whatever those tests are, they ought to be set forth in the law itself.

Mr. Chairman, I've taken too much time again, I'm sorry.

Senator EVANS. Not at all.

We do appreciate your testimony here. I suspect there will be other written questions that may be submitted to you. It will be helpful to have your further analysis, if you wish to submit it, on all of the bills that are in front of us, some having been submitted admittedly too late to have your analysis.

Mr. TERRY. Mr. Chairman, we do have a survey showing the capacity and environmental and recreational improvements in the absence of takeover attempts, and we feel that that might be helpful to the committee's consideration and would like to submit that for the record.*

Senator EVANS. We will add it to the record and be happy to do so.

With that, we will stand in recess until 2 o'clock this afternoon, and the first panel at 2:00 o'clock this afternoon will be Mr. Alex Radin, executive director of the American Public Power Association with his accompanying team.

[Whereupon, at 12:40 p.m., the subcommittee was recessed, to reconvene at 2 p.m. the same day.]

AFTERNOON SESSION

Senator MURKOWSKI [presiding]. We will call the Water and Power Subcommittee hearing back to order.

I would like to thank my colleague, Senator Dan Evans, for bearing with us this morning and getting through panel one. I think it was most noteworthy, Dan, and I am most appreciative. I had a little function involving my re-election, so I had to excuse myself. It was quite successful, Dan. Again, my thanks. And my thanks to all of you.

Panel two: Mr. Alex Radin, executive director, American Public Power Association, who will be accompanied by Mr. Robert McKinney, general manager of Cowlitz County Public Utility District in Longview, WA, where I used to fish as a kid in the Cowlitz River; and Mr. John W. Wilson, Wilson Associates, Washington, DC.

That leaves us how many to go after them?

Mr. BROWN. Eighteen.

Senator MURKOWSKI. Eighteen to go, so that will give you an idea of the score where we are.

Gentlemen, we are pleased to have you with us today, and thank you for bearing with us through the morning. We look forward to your testimony.

We will of course abide by the lights, and with that I will ask you to proceed.

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*The material was not received for the record.

STATEMENT OF ALEX RADIN, EXECUTIVE DIRECTOR, AMERICAN PUBLIC POWER ASSOCIATION

Mr. RADIN. Thank you, Senator Murkowski and Senator Evans. We appreciate the opportunity of appearing here before you. I believe the last time I timed my testimony it was 4½ minutes, so we'll try to keep it within that.

Senator MURKOWSKI. Thank you.

Mr. RADIN. The American Public Power Association, which represents about 1,750 municipals and other local publicly owned electric utilities, has long supported the concept of institutional competition, which is made possible by the pluralistic electric utility system in the United States, which in fact is quite a unique system. We believe that such competition is beneficial to the consumer.

We oppose S. 426 and S. 403 because these bills for all practical purposes would virtually preclude any real competition in the relicensing of hydroelectric power projects and would impair the opportunity for competition within the electric utility industry itself.

In your consideration of whether it is appropriate or necessary at the present time to amend the Federal Power Act as it relates to relicensing, I hope you will keep the following points in mind:

First, it is not necessary to rush to judgment. The enactment of part one of the Federal Power Act was the culmination of debates that spanned two decades and which occupied the attention of Congress for nearly 4 years from 1916 to 1920. The policies and principles relating to the development and use of the public's falling water resources, which are at the foundation of the act, were established after years of serious deliberation, and they should not be cast aside in haste.

Furthermore, no licensee has thus far been disadvantaged by the existing act. Since 1970, nearly 130 licenses have expired and new licenses have been issued to all but about 40 of the previous license holders. Of the cases now pending, only 11 are being contested. Thus far, not a single license has changed hands.

A further reason for not taking hasty action is that the interpretation of the applicable provisions of the Federal Power Act is still before the courts. It would, therefore, seem prudent to await a legal clarification of the present act before taking action on new legislation.

Second, the debate over licensing should not be regarded as centering on the question of whether there is or should be a municipal relicensing preference. Clearly this is a significant element for consideration, but the underlying issue as we see it is whether there should be competition in relicensing, or whether the right to use this public resource should be granted to private parties in perpetuity.

The Congress, which enacted the Federal Water Power Act in 1920, endorsed competition and rejected the principle of granting rights in perpetuity. The preference extended to States and municipalities was supported as a means to this end, and the competitive relicensing proceedings to date have demonstrated the wisdom of this approach.

In fact, it's our view that there would be no competition in reality under either S. 403 or S. 426. In a broader sense, institutional competition between publicly and privately owned utilities, competition which is enhanced by a relicensing preference to public agencies, results in more efficient electric service for all consumers.

With regard to the development and use of water resources, experience has demonstrated that competition in the relicensing process results in advantages for the general public regardless of which applicant receives the license, and there are more specific details on this point in my testimony.

Third, it is important to be clear as to the manner in which the relicensing preference in the Federal Power Act actually works. Government status is not the sole determinant in competitive relicensing proceedings involving public and private relicensing applicants, as has been alleged.

In fact, according to an interpretation which thus far has been confirmed by the courts, but which is still being challenged, the public power preference applies only when the Federal Energy Regulatory Commission determines that the plans of publicly and privately owned applicants are equally well adapted to the development of a resource. But it's only in this tie-breaking situation that the public preference applies.

We believe that such a preference is sound public policy and should not be changed. For reasons I have given this afternoon, we do not think that the legislation is needed at all at this time.

Thank you very much.

Senator MURKOWSKI. Thank you very much, Mr. Radin. I appreciate that. If you have further comments they will be entered into the record.

[The prepared statement of Mr. Radin follows:]

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STATEMENT OF
ALEX RADIN
EXECUTIVE DIRECTOR
AMERICAN PUBLIC POWER ASSOCIATION
ON
HYDROELECTRIC RELICENSING

Submitted to the
Subcommittee on Water and Power
Committee on Energy and Natural Resources
United States Senate

Washington, D.C.

June 11, 1985

Mr. Chairman, members of the Subcommittee, my name is Alex Radin. I am executive director of the American Public Power Association, a national service organization representing approximately 1,750 municipal and other local public power systems throughout the country.

Although the publicly owned utilities represented by our Association serve only about 13.4 percent of the population, they are an important element in this Nation's pluralistic electric industry, which consists of 210 private power companies, 2252 local public power systems, 929 rural electric cooperatives, and 12 federal power agencies.

Our Association has long supported the concept of institutional competition which is made possible by the United States' unique pluralistic electric industry. We believe such competition is beneficial to the consumer. We oppose S.426 and S.403 because these bills, for all practical purposes, would virtually preclude any real competition in the relicensing of hydroelectric power projects, and would impair the opportunity for competition within the electric utility industry itself.

I. Introduction

As you proceed through this hearing and then move to consider whether it is appropriate or necessary at the present time to amend Part I of the Federal Power Act insofar as it relates to relicensing, I hope you will keep the following points in mind:

First, it is not necessary to rush to judgment. The enactment of Part I of the Federal Power Act was the culmination of debates that spanned two decades, and which occupied the attention of Congress for nearly four years -- from 1916 to 1920. The policies and principles relating to the development and use of the public's falling water resources which are at the foundation of the Act were established after years of serious deliberation; they should not be cast aside in haste.

Furthermore, no existing licensee has thus far been disadvantaged by the existing act. Since 1970, nearly 130 licenses have expired, and new licenses have been issues to all but about 40 of the previous license holders. Of the cases now pending only 11 are bing contested. Thus far, not a single license has changed hands.

A further reason for not taking hasty action is that the interpretation of the applicable provisions of the Federal Power Act is still before the courts. It would therefore seem prudent to await a legal clarification of the present act before taking action on new legislation.

Second, the debate over relicensing should not be regarded as centering on the question of whether there is or should be a municipal relicensing preference. Clearly, this is a significant element for consideration, but the underlying issue, as we see it, is whether there should be competition in relicensing or whether the right to use this public resource should be granted to private parties in perpetuity. The Congress which enacted the Federal Water Power Act in 1920 endorsed competition and rejected the principle of granting rights in perpetuity. The preference extended to states and municipalities was supported as a means to this end, and the competitive relicensing proceedings to date have demonstrated the wisdom of this approach.

In a broader sense, institutional competition between publicly and privately owned utilities -- competition which is enhanced by a relicensing preference to public agencies -- results in more efficient electric service for all consumers. With regard to the development and use of water resources, experience has already demonstrated that competition in the relicensing process results in advantages for the general public, regardless of which applicant receives the license. More specific details on this point are cited subsequently in this statement.

Third, it is important to be clear as to the manner in which the relicensing preference in the Federal Power Act actually works. Government status is not the sole determinent in competitive relicensing proceedings involving public and private relicensing applicants, as has been alleged.

In fact, according to an interpretation which thus far has been affirmed by the courts (but which is still being challenged), the public power preference applies only when the Federal Energy Regulatory Commission determines that the plans of publicly and privately owned applicant are equally well adapted to the development of a resource. It is only in this tie-breaking situation that the public preference applies. We believe that such a preference is sound public policy and should not be altered.

II. Background

For nearly twenty years, from 1900 - 1920, the Congress struggled with proposals relating to the development and use of the nation's rivers and streams. Underlying the numerous debates on this issue were two fundamental public policy questions. First, who owns the falling water resource? Second, how can this resource be managed to provide maximum public benefits?

In reviewing this long legislative history, four basic concepts or principles can be identified as the Congressionally-endorsed answers to these two public policy questions. First, the resource was held to belong to the public, and should therefore be developed and utilized directly by the public wherever possible. Second, grants in perpetuity should not be allowed because they would forever divest the public of its ownership interest. Third, building on the rejection of perpetual rights was the principle that steps should be taken to restrain monopoly control both with respect to the use of this public resource and within the electric utility industry. Finally, comprehensive development should be encouraged. Congress realized this resource was suitable for a multitude of uses and caution needed to be exercised to ensure that the only revenue producing use -- power production -- was not pursued at the expense of all other uses.

The principles of public ownership and rejection of perpetual rights to this public resource were clearly articulated by President Theodore Roosevelt in his veto of the Rainey River bill in 1908. In his veto message to Congress President Roosevelt stated:

> The present policy pursued in making these grants is unwise in giving the property of the people and the flowing waters to individuals or organizations practically unknown, and granting in perpetuity these valuable privileges in advance of the formulation of definite plans as to their use. (Emphasis Added.)

The themes of monopoly control and comprehensive development are seen in the report of the White House Conference of Governors on Conservation issued in 1908. Specifically, the Conference recommended

> the enactment of laws looking to the conservation of water resources to the end that navigable and source streams may be brought under complete control and fully utilized for every purpose (and) ... that the waters should be so conserved and used as to...develop power in the interests of the people...and that monopoly should not be tolerated. (Emphasis added)

These four elements or principles are all drawn together in the state and municipal preference in licensing and relicensing contained in the Federal Water Power Act. Consistent with the premise that this is a public resource, the preference was designed to encourage public rather than private development and use. The prohibition against perpetual grants contained in the Act in the form of limited license terms, in combination with the relicensing preference, was designed to preserve for future generations the opportunity for public control. Preference was likewise the means to the end of ensuring comprehensive development. Roosevelt, the Congress, conservationists and others believed that public developers would be more aware of the multiple and frequently conflicting uses of this resource. They would be motivated not only to produce power for local sale or use but also by a desire to develop the resource in a manner which best served the public interest. Finally, the preference would create competitive pressures to counter the problems of monopoly control and the abuse of monopoly power.

The battle to include the preference in both licensing and relicensing proceedings was not easily won. The private power companies mounted a massive campaign designed to ensure their first and perpetual access to this valuable public resource. However, their campaign proved unsuccessful.

Indeed, during debate over legislation nearly identical to the measure which was ultimately adopted, representatives of the private power companies conceded the existence of this relicensing preference. For example, Mr. John R. Britton, Vice President of Pacific Gas and Electric Company, stated during hearings on water power legislation in 1918, "I do believe that most of these plants erected under these licenses where they are applicable to a growing community will be taken over by municipalities and operated by them not by the lessee." Interestingly, the bill which was the subject of the 1918 hearing contained a discretionary preference on behalf of states and municipalities. The discretion of the Commission to abide by this preference was subsequently eliminated as the legislation moved through Congress.

Today, the companies feign surprise and even shock that the Federal Power Act could somehow be read as requiring a public preference in the relicensing process. And yet, it is clear that during consideration of legislation, which eventually became the Federal Water Power Act of 1920, the companies not only recognized but accepted the proposition that the municipal preference applied both in licensing and relicensing proceedings. Private utilities that have been granted the use of this public resource have always known that their licenses were not perpetual but were of limited duration subject to possible transfer to a public entity upon expiration. The companies accepted their licenses subject to these conditions. Today, they would renege on this bargain and are urging the Congress to change the rules of the game.

One of the major arguments advanced by the private companies to justify a change in the Act is that the relicensing provisions are ambiguous and need to be clarified. In order to substantiate this allegation the companies argue that the Federal Energy Regulatory Commission has, on four different occasions, reached conflicting conclusions regarding the question of whether preference applies during relicensing proceedings. What they fail to note, however, is that the only time this issue was fully and fairly considered, the Commission held that preference does apply in the relicensing process.

It is perhaps worthwhile to review briefly the four "conflicting" Commission determinations.

The first situation occurred in 1957 when the Chairman of the Federal Power Commission, Chairman Kuykendall, advised the Congress that he interpreted the Act as not providing a relicensing preference. Obviously, this was nothing more than the interpretation of the Act by one individual and was not the subject of full Commission consideration. The second instance cited by the companies occurred in 1967 when the chairman of the Federal Power Commission (now Federal Energy Regulatory Commission), Lee White, advised the House of Representatives that his counsel had advised him that the municipal preference did not apply in the relicensing of hydroelectric projects. Mr. White did not state that this was his opinion, only that his counsel had so advised him. The extent to which the Commission counsel undertook a thorough review of the legislative history is unclear. In any event, this was not an issue considered by the full Commission.

The third instance occurred when the Commission in 1980 issued its decision in the Bountiful, Utah case. In the 1970s, the city of Bountiful, Utah filed a competing application for the relicensing of a project previously licensed to the Utah Power and Light Company. During the same period the city of Santa Clara, California had filed a competing license application for a project previously licensed to Pacific Gas and Electric Company. These two municipalities petitioned the Federal Energy Regulatory Commission to undertake a declaratory order proceeding for the sole purpose of interpreting the preference provisions of the Federal Power Act. Both Bountiful, Utah and Santa Clara, California were proceeding on their understanding of the Federal Power Act which they read as containing a municipal preference in relicensing. However, before they expended further public funds in pursuit of their relicensing applications, they felt it necessary to have the Commission interpret the statute and establish once and for all the legal ground rules which would govern future relicensing cases.

The Commission agreed that this was an appropriate course of action and solicited comments from all interested parties. (Obviously, the Commission did not feel bound, as indeed it was not, by the interpretation of the Act in 1957 by Chairman Kuykendall, or by the 1967 reading of the Act by the Commission's general counsel which opinion was transmitted to the House by Chairman White.) Attorneys representing investor owned utilities and public power systems across the country examined the statute and its legislative history and submitted comprehensive initial and reply briefs to the Commission. A full day of oral argument was held when all parties were given an opportunity to make their case before the members of the Commission. Following this proceeding in which the due process rights of all parties were fully protected, the Commission issued its decision. The Commission unanimously concluded that Congress had indeed intended the municipal preference to apply in relicensing proceedings.

The Commission noted however, that this preference was not automatic. Instead, the preference would serve as a tie-breaker when all other factors were equal. It was up to the Commission to weigh the merits of the plans submitted by all applicants and thereafter determine which plan would result in the best development and utilization of this resource in the public interest. Only where the plans were otherwise equal would the preference come into play breaking the tie, as intended by Congress, in favor of the public applicant.

The investor owned utilities appealed this decision to the 11th Circuit Court of Appeals where the Commission's decision was affirmed. In June 1983, the U.S. Supreme Court denied a request for certiorari.

At that point, all participants in the Bountiful proceeding, public and private utilities alike, felt the issue was closed, subject only to possible Congressional modification.

Shortly after the Supreme Court declined to review the Bountiful, Utah case, the first competitive relicensing proceeding came before the full Commission. In that case, Pacific Power and Light Company and a municipal joint operating agency, consisting of the Clark and Cowlitz County Public Utility Districts in the state of Washington, were competing for the right to the future use of the Merwin Dam on the Lewis River in Washington.

The Merwin Dam had originally been licensed to the Inland Power Company. During the 50 year license term the project was transferred from Inland to Pacific Power and Light. Throughout the proceeding on Merwin Dam, both Pacific Power and Light and the joint operating agency considered themselves bound by the decision issued by the Commission and affirmed by the courts in Bountiful. Likewise, the Commission's administrative law judge felt obligated to follow the rule of law established in Bountiful. He concluded that the plans of the competing applicants were at least equal in the public interest and, applying the preference principle, directed that the new license should be awarded to the joint operating agency.

However, when his decision came before the full Commission for review, three of the five commissioners, none of whom had participated in the Bountiful proceeding, felt they were not bound by the Commission's previous decision or by the mandate of the 11th Circuit Court of Appeals. Without the benefit of briefs or oral arguments; indeed, without the question even having been raised by either of the participants in the proceeding, these three Commissioners voted to overrule the Bountiful decision. This then was the final, and we believe highly suspect, Commission decision cited by the power companies to demonstrate confusion over the proper interpretation of this act.

Interestingly, having concluded by a 3 to 2 vote that preference did not apply in cases involving competition between a municipality and an existing licensee, the Commission then concluded by a vote of 5 to 0 that the plans of the existing licensee, Pacific Power and Light Company, were superior to those advanced by the joint operating agency. (Both the administrative law judge and the Commission found the financial, environmental, and operational plans submitted by the public agency were at least equal to those submitted by PP&L. However, the Commission concluded PP&L's overall plans were superior based on a questionable economic analysis.) The Commission then directed that the license be awarded to Pacific Power and Light Co.

The Merwin decision is now on appeal before the U.S. Circuit Court of Appeals for the District of Columbia. Oral argument was heard on October 17, 1984.

Once the Merwin case progresses through the Federal Courts, the strictly legal question of the proper interpretation of the intent of Congress in 1920 will be finally and forever resolved. We doubt whether any future Commission will display the type of disrespect for a decision of the Court of Appeals as was displayed by the three commissioners in their ruling in the Merwin case. Thus, quite clearly, it is not imperative that the Congress act to resolve any uncertainty. The uncertainties will soon be resolved in the courts. At that time, Congress may wish to consider whether or not there should be revisions in the Federal Power Act.

However, we believe it is clear that the companies are not simply interested in resolving uncertainty with respect to the interpretation of the Federal Power Act. They are not interested in questions of certainty regarding the process to be followed or the rules to be applied in the relicensing proceedings. The uncertainty they would elminate applies to the result of these relicensing proceedings. The bill they are supporting, S.426, would accomplish that goal. But Congress never intended certainty in perpetuity to result. If Congress wished to do so, it would not have directed limited term licenses. Instead, it would have authorized licenses in perpetuity. Congress refused to do this in 1920 and it should refuse to do so today.

III. Preference in Relicensing Is Sound Public Policy

Preference, in the limited context of relicensing and in the more general context of the public's first right to federally generated hydroelectric power, fosters competition in the utility industry. In the 1920's there were over

4,000 investor owned electric utilities. Today, there are only 210. This concentration of power in the hands of a relatively few corporations is offset to an extent by the existence of over 2,000 public power systems and nearly 1,000 rural electric cooperatives. While there is little head-to-head competition in the form of two utilities operating in the same service area, the existence of different types of utilities and the opportunity for communities to select the type of utility they wish to provide this essential public service does bring about more efficiency and protection from excessive rates for all consumers.

The preference in relicensing, while admittedly not as significant as the preference in power marketing, nevertheless holds open an opportunity for local communities to acquire power production resources and take charge of their electric power supply destiny. The existence of this opportunity, whether or not utilized, serves as a restraint on the monopoly power exercised by the private power companies.

The private power companies tend to discount the positive role played by this type of competition. They argue that the impact of the relicensing preference, if it exists, provides no restraints on monopoly power. In any event, they argue that consumers are far better served if existing licensees retain their licenses to this public resource in perpetuity. Thus, they conclude, the debate over relicensing is nothing more than a debate over what is in the best interest of the consumers. This theme is carried forward in the very title of the legislation they support, S.426, the Electric Consumers' Protection Act of 1985. (Ironically, the Consumer Federation of America, the Nation's largest consumer organization, has gone on record in support of the principle of preference to municipalities in relicensing.)

APPA agrees that this relicensing debate does raise serious consumer protection issues, but we strongly disagree that consumers as a whole are better protected by legislation simply designed to preserve the status quo and permit investor owned utilities to retain access to public resources in perpetuity. We believe that consumers and the public are far better served by a relicensing process in which competition for the future use of this public resource is possible. Such a situation now exists under the Federal Power Act, and unless there is some drastic disruption within the electric utility industry as a result of the operation of the present law we see no necessity for Congressional action.

As I stated at the outset, it is important that Congress consider the positive benefits of competitive relicensing proceedings. Although the number of competitive relicensing cases is limited, the benefits flowing to the public are now well documented. For example, in a letter of May 15, 1984 to the former chairman of the House Energy Subcommittee on Energy Conservation and Power, Richard Ottinger (D., N.Y.), the U.S. General Accounting Office reviewed 9 competitive and ten non-competitive relicensing proceedings. GAO observed that amendments to the original applications were filed in five of the nine competitive relicensing proceedings.

According to GAO, "in three of the five cases with amendments, we noted that the private utilities upgraded power production operation plans after the competing license applications had been filed." (A copy of the GAO letter to Ottinger is attached as Exhibit A.) The specifics of some of these cases are significant. For example, in one of the cases referred to in the GAO report, the private utility licensee advised the Commission that it had developed the full power potential of the river and no further improvements were possible. Although not identified by name in the GAO report, this is obviously the Rock Creek-Cresta Project originally licensed to Pacific Gas and Electric Company. By the time the competing public agencies had filed first their competing and then their consolidated applications, they had proposed to increase the capacity of the project by a total of 66,080 kW. As a result of this competitive pressure, PG&E followed suit.

In another case, also involving PG&E, the Company, filing a relicensing application on the Haas-Kings River project, again did not produce any capacity increases. Competing public power applicants filed their applications proposing an increase in capacity of 60,000 kW. PG&E then filed an amendment to its initial application proposing an increase in capacity of 34,600 kW.

The obvious point here is that the competitive relicensing process will yield public benefits regardless of who prevails in these particular cases. The public benefits because additional capacity and energy will be obtained from these existing facilities. Further, this energy and capacity will come, of course, from a clean, renewable, domestic energy resource. Without these competitive pressures the Commission would likely have accepted PG&E's assertions that capacity and energy increases were not possible.

Competition yields not only benefits in the form of additions in power production but in recommendations for improvements in the environmental and recreational aspects of existing projects. For example, GAO noted that "in the other two cases where amendments were submitted after competing applications had been filed, we noted that the recreational plans were upgraded." Finally, GAO pointed to one situation where the competing applicant had proposed to improve the project's environmental plan. No improvements were recommended by the private utility licensee. "In its original relicense application," observed GAO, "a private utility had stated that since no significant changes were to be made in the project's operation, there would be no changes in the fish, wildlife, or botanical resources in the project area. However, a public entity submitted a competing license application laying out ways to enhance the project's recreational and fisheries facilities where possible." At the time the GAO letter was sent to Rep. Ottinger, the private utility license applicant had not submitted an amended application.

In contrast, in the uncontested cases (five pending and five completed) GAO failed to observe any instance in which the license applicants had filed any amendments to their applications. GAO did note that FERC had imposed stipulations on the licensees in those cases where licenses had been issued, and the licensees were forced to incorporate certain improvements in their plans. However, these improvements were far less dramatic than those seen in the competitive proceedings. None involved an increase in power production. Generally, the stipulations involved the preparation of additional studies and plans or required certain monitoring activities on behalf of the licensee.

The benefits of competition in the Merwin Dam case, a case not reviewed by the GAO, were discussed in a letter to a representative of the National Wildlife Federation from the Washington State Assistant Attorney General who representated the State's fisheries and game departments before FERC. In that letter the Senior Assistant Attorney General noted that Washington State was able to obtain agreement for mitigation of fish and wildlife in the Merwin Dam proceeding "in large part because of the fact that there was competition for the license." He went on to observe that there were "very low probabilities of getting agreement on such mitigation absent a competitor."

Others have also recognized the benefits of competition in relicensing. For example David Conrad, representing Friends of the Earth in the hearing on relicensing issues before the House Energy Conservation and Power Subcommittee on June 5, stated that "it can be demonstrated that vigorous competition can result in significant and necessary environmental improvements that otherwise would not be adopted." Similar statements were made by Russell Shay of the Sierra Club, and William Knapp of the U.S. Fish and Wildlife Service.

It has been suggested that a competitive relicensing proceeding will in the end result in "gold plated" proposals and that competitors will offer improvements which are both unnecessary and totally unrealistic. We would note that that certainly does not seem to be the case in any of the situations reviewed by GAO. In addition, this strikes us as a specious argument. We would hope that the Congress and the public can depend on FERC to evaluate the proposals and determine which recommendations make sense and are in the public interest and which are not.

Based on the existing evidence, we believe that competition is in the public interest. Congress is the ultimate trustee of this public resource and we strongly believe that Congress would be abdicating its responsibility as a trustee if it were to amend the Federal Power Act by adopting legislation such as S.426, which would prevent competition for the future use of this resource.

As I stated at the outset, we view competition as the issue in this debate over relicensing. However, preference is critical if competition is to be preserved. With one exception involving Indian tribal rights and other unique facts, all other competitive relicensing proceedings have involved public agencies. Public agencies have filed these applications in major part because they believed that if they could offer plans at least equal to those offered by the existing private utility licensees, the tie thus created would be broken in their favor. But it is evident from the GAO report that, in six of the nine cases examined, the public agencies have offered to do much more than the private utility applicants. These public agencies have not played to tie, they have played to win, but they have decided to play in the first place only because they felt their proposals would be fairly evaluated and, in the event of a tie, the preference would operate in their favor.

It has been alleged that APPA's support of preference is based on the contention that public power better serves the public. This is a gross mischaracterization of our position. It is true that public power costs less; that in most categories public power's operating expenses are lower, on a unit basis, than those of private power companies, and that on average public power systems contribute more to state and local governments in terms of services and in-lieu-of-tax payments than do investor owned utilities. Notwithstanding these benefits of public power -- benefits of which we are understandably proud -- we are not basing our case for preference on the proposition that we provide better or lower cost electric service to our consumer owners.

On the other hand, the existence of public power does provide competitive pressures which benefit all electric consumers. In the relicensing context, the preference promotes competition, competition yields plans for the future use of this public resource which are clearly superior to the plans which have been submitted in the absence of competition, and this in turn provides significant benefits to the public at large irrespective of what type of utility provides individual members of the public with their electric service.

In addition, we believe Congress was correct in 1920 when it recognized that public agencies, units of local government or states, would be interested in developing the water resources giving consideration to the multiplicity of suitable and often conflicting uses as opposed to for-profit utility companies whose prime concern would be to maximize power production and revenues. This is still a public resource, and public agencies responsive to all of the public's needs with respect to the use of the resource has the potential of being a better trustee than a private, for-profit corporation. When viewed from these perspectives we believe the public interest is better served where preference in relicensing exists.

IV. S.426 Is Not Good Public Policy

APPA opposes S.426 because it eliminates public power preference in relicensing, eliminates competition in relicensing proceedings, and will result in perpetual grants of a public resource to private companies. For these reasons, we do not believe this legislation is in the public interest.

Last year, during hearings by the House Energy Committee's Subcommittee on Energy Conservation and Power on H.R.4402, a bill identical to S.426, Mr. Frederick W. Mielke, Jr., Chairman, Pacific Gas and Electric Co., said "we will compete evenhandedly with the competition for that (project), as to whether our improvements to that project are better than the improvements proposed by the competition." This year, Senator Wallop, in a statement inserted in the Congressional Record on February 7, 1985 on the introduction of S.426, stated that in his view "the optimal result for the public and the resource is achieved when the regulatory agency is required to make a decision on the merits based on public interest standards in the law and an opportunity exists for a competitor to show its plans are better than those of the existing licensee." (Emphasis added)

The fact of the matter is, however, that under H.R.4402 (identical to H.R.44 of this Congress) and S.426, there would be no evenhanded competition in relicensing apparently supported by Mr. Mielke, nor would there be any realistic opportunity for a competitor to demonstrate that its plans are better than those of the existing licensee, as suggested by Senator Wallop. In fact, S.426 is clearly drafted to prevent competition. Under this bill, if the FERC found that the plans of the existing licensee met the minimum standards of section 10(a) of the Federal Power Act, or in the alternative if the existing licensee agreed to abide by new conditions imposed by FERC pursuant to the Commission's authority under section 10(a), then the Commission would not even consider the substance of competing applications. (A memorandum explaining how the relicensing process would operate if S.426 were to be enacted is attached to this statement as Exhibit B.) Under these circumstances, it would be foolhardy indeed for any entity to go to the time and expense of preparing a competing application. This would be particularly true for a governmental entity which does not have risk capital available and would be forced to expend public funds for such an undertaking. No city council or public utility governing board would ever authorize such an expenditure, in my opinion.

If members of Congress believe that the existing preference in relicensing would automatically result in all municipal competitors receiving new licenses for existing projects (even though this is not the way the municipal preference operates) and oppose existing law for that reason, then we believe they should likewise oppose S.426 which will, with even greater certainty, always result in the relicensing of existing projects to the incumbent licensee. When S.426 is fully understood, there can then be only one logical reason to support it, and that is a desire to prohibit competition in relicensing and ensure perpetual use of this public resource by all existing licensees. APPA does not believe that this is in the public interest. Although we do not believe that all original licenses would change hands (in fact, experience to date has shown that few will do so) nevertheless, the opportunity should be available for a viable challenge to existing licensees, where there is a potential for improving the project.

The benefits of competition in relicensing have been clearly demonstrated. If competition is the desired result, then the prohibition against perpetual use and the preservation of the municipal preference are appropriate means to that end. Clearly, there will be no competition if all existing licensees are guaranteed continued access to existing projects. Likewise, we do not believe competition will occur if the relicensing preference is eliminated. Contests between investor owned and publicly owned utilities are not contests between equals. Investor owned utilities have assets which exceed by several orders of magnitude the assets available to publicly owned systems. In such contests between inherently mis-matched opponents, the preference does not create an unequal playing field; in fact, it is a balancing factor designed to equalize the competitors. If this factor is removed, as it would be under S.426, then in most cases public power systems will simply elect not to compete.

V. Hydroelectric Facilities Relicensing Amendments, S.403

Because S.426 appears to be the bill which has generated the most interest and certainly has the greatest support both within the investor owned community and the Congress, I have concentrated on why we oppose that particular measure. I would like now to offer some brief comments on two other bills now pending before the Subcommittee, S.403, Senator Johnston's bill entitled, the "Hydroelectric Facilities Relicensing Amendments," and S.1219, Senator Metzenbaum's bill entitled, the "Fair Competition in Hydroelectric Licensing Act."

It is certainly not a foregone conclusion that there would be no competition in relicensing under S.403. Unlike S.426, which modifies the compensation formula of existing law to require a new licensee to pay "just compensation" as opposed to depreciated net investment plus severance damages, the Johnston bill retains the net investment standard. We believe this is appropriate for several reasons. First, by retaining the net investment standard, S.403 preserves the economic incentive necessary for the filing of competing applications. Second, net investment is easily calculated whereas "just compensation" could range anywhere from net investment to the cost of replacing the power which would otherwise have been available from the hydro facility, regardless of whether or not such replacement would take place. This uncertainty in compensation under S.426 to be paid in the event of a successful competition for a new license could well discourage competition.

Nevertheless, we oppose S.403 for two reasons. First, it eliminates the public preference and substitutes a preference in favor of the existing licensee. We believe this will effectively discourage public agencies from filing competing applications. Second, the bill establishes standards to be considered by FERC in evaluating competing applications, one of which is a consideration of the economic impacts on the consumers of each applicant in the event of the failure of that applicant to receive a new license. We are concerned that this standard could be used to justify granting new licenses to the largest applicant which will in virtually every case be the investor owned utility.

VI. Fair Competition in Hydroelectric Licensing Act of 1985, S.1219

The Association has no position on S.1219, Senator Metzenbaum's bill. We appreciate the fact that Senator Metzenbaum has preserved the preference as a tie-breaker; however, by eliminating the public agencies' final right to amend its application it diminshes the value of the preference. The bill also alters the compensation required in the event of a license transfer, requiring the new licensee to make available a portion of the project's power over a limited period of time to the old licensee. This requirement may reduce to some extent the economic incentive to file competing applications. Nevertheless, the changes made in the relicensing process by S.1219, unlike those proposed on S.426, would not cripple competition in relicensing.

We do believe that Senator Metzenbaum has raised two critically important issues which deserve to be addressed: (1) a provision authorizing the Commission to include as a license condition for a new license to an existing project a requirement that the utility licensee agree to make available any excess transmission capacity to other utilities under certain terms and on receipt of just and reasonable compensation; and (2) a requirement that an antitrust review of utility applicants be undertaken as part of the relicensing process. Both of these propositions are consistent with APPA policy and we believe they will contribute to greater competition within the electric utility industry.

Finally, we believe that if the rules for relicensing proceedings are to be altered, the new rules should apply only prospectively. The public agencies which have incurred the expenses involved in the preparation of competing applications have done so based on a good faith belief that the proceedings would be conducted under the provisions of existing law. Millions of dollars of public funds have been spent and some of these cases have been pending before the Commission for several years. We believe it is only equitable to permit those proceedings to go forward and be evaluated based on the provisions of the Federal Power Act as it currently exists. We appreciate Senator Metzenbaum's recognition of the fairness of such an approach as evidenced by his inclusion of a "grandfather" clause in his bill.

VII. Hydroelectric Relicensing Reform Act, S.1260

Sen. Evan's bill S.1260, was introduced only last Friday. We have not had an opportunity to study this bill in detail, and would therefore like to reserve an opportunity to submit detailed comments on it at a later date. However, a cursory review indicates that it contains a number of elements of a sound, public interest national policy. Sen. Evans is to be commended for making a constructive, thoughtful contribution to the consideration of this issue, and we are particularly pleased that he has retained the concept of preference to municipalities as a tie breaker.

VIII. Conclusion

While we recognize that the investor owned utilities have been able to generate considerable political momentum behind their legislation, we believe that a fair and unbiased review of the current situation demonstrates that the current law isn't broken and simply doesn't need to be fixed. Consider the following:

- There have only been 11 competitive relicensing proceedings involving municipal or preference competitors out of a total of nearly 130 relicensing proceedings to date.

- No licenses have changed hands as a result of the application of present law. Indeed, in the only case to go through the relicensing process in which there were competing applicants, the Merwin Dam case, the Commission by a unanimous vote held that the plans of the incumbent licensee were superior to those of the competing public agency applicant. While the Commission overruled the Bountiful precedent and held there was no preference, it did not need to reach that question on its conclusion that there was no tie to be broken.

- There is no need to clarify the law regarding the existence of the preference. The Merwin case is now before the courts and the existence or absence of the preference will be resolved when that decision is rendered.

- Establishing standards for evaluation of competing applications is not necessary, nor will establishing such standards reduce or eliminate future litigation. The Commission in Bountiful outlined certain standards which it deemed relevant in evaluating which plans were best adapted in the public interest. It is quite possible that some or all of these standards will be challenged in the courts. However, no matter what standards the Congress establishes they will also be subject to Commission interpretation and thereafter to judicial review.

- Finally, and most important, the existing process works and provides significant benefits to all. Existing law contemplates competition, competition has occurred in a limited number of cases, and as a result plans for the use of the public resources at issue in those competitive proceedings have been improved by virtue of the existence of the competitors and their demonstrated ability to present superior plans.

For all of these reasons, Mr. Chairman, we believe legislative action at this time is premature. True, the Act is 65 years old, but its relicensing provisions have only recently come into play. Give the Commission and the courts time to sort out the law and then, and only then, will Congress really be in a position to determine whether additional legislation is necessary.

Exhibit A

UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

RESOURCES, COMMUNITY, AND ECONOMIC DEVELOPMENT DIVISION

May 15, 1984

[illegible] the General [illegible] Congressional Relations. [illegible]

B-200490

The Honorable Richard L. Ottinger
Chairman, Subcommittee on Energy
  Conservation and Power
Committee on Energy and Commerce
House of Representatives

Dear Mr. Chairman:

Subject: Information on Relicensing Cases at the Federal Energy Regulatory Commission (GAO/RCED-84-116)

Your April 13, 1984, letter requested that we provide information on whether the public benefits when competing applications are filed for relicensing existing nonfederal hydroelectric facilities. You also asked that we provide information on whether the Federal Energy Regulatory Commission (Commission), which reviews applications and issues the licenses, can serve as a surrogate for competition when no competing application is filed. You asked that this information be provided in time to use for May 17, 1984, hearings.

In regard to the first issue, we found that in five of the nine competitive licensing cases we examined, the licensee submitted an amendment to upgrade the project after a competitive application was filed. In examining 10 noncompetitive licensing cases with respect to the second issue, we noted that in some cases the Commission has required licensees to make improvements to facility operations. The following sections briefly describe the Commission's licensing role; our objectives, scope, and methodology; and detailed results of our review.

COMMISSION'S LICENSING ROLE

The Commission is authorized, among other matters, to issue licenses to nonfederal entities for building and operating hydroelectric facilities for the development of the Nation's water resources. The licenses, issued for a period up to 50 years, require that any hydroelectric project be adapted to a comprehensive plan (prepared by the applicant) for developing and using water resources, not only for power development, but also for other purposes such as recreation, water quality, irrigation, fish and wildlife enhancement, and overall environmental effect. The Commission is required to give preference to states and

(005333)

(over)

municipalities, over a privately-owned utility, whenever the two entities file equally well-adapted plans for the same project.

At the expiration of a license, the Commission is authorized to grant a new license. To obtain a new license, the existing licensee must file an application for relicense no later than 3 years before its existing license expires. A new license is not automatic and is subject to competition. Many of the licenses originally issued to privately-owned utilities have expired and the utilities have applied for relicenses. In some instances, public agencies have also filed competing applications for the license.

Between August 1970 and April 1984, the Commission had issued 95 new licenses to existing licensees in uncontested cases and 1 new license to the existing licensee in a contested case. In addition, the Commission is currently in the process of relicensing 32 other projects. Competing applications have been filed for 11 of these projects currently licensed to privately-owned utilities. Nine of the competing applicants are municipalities, one is two Indian tribes, and one is a rural electric cooperative.

OBJECTIVES, SCOPE, AND METHODOLOGY

One objective of our review was to obtain information concerning whether the public benefits when competing applications are filed for the existing nonfederal hydroelectric facilities. To do this we reviewed the applications and correspondence on file at the Commission for the nine contested cases involving municipalities (listed in enclosure I) to see if the private utilities had filed amended applications containing more actions after their relicense applications had been contested.

We reviewed these files at the Commission's headquarters in Washington, D.C. We interviewed cognizant officials within the Commission; reviewed and extracted relevant information from the application case files; and examined applicable federal regulations.

The second objective was to obtain information on uncontested applications and relicenses to see if the Commission had issued the relicense contingent upon further actions being taken by the applicants. We selected 10 uncontested cases (listed in enclosure II) from the universe of 116 cases. The 10 selected were chosen to provide a broad geographic coverage and to reflect different project sizes. We selected five cases where the Commission had issued the licenses and five cases that are pending. In the five issued cases, we reviewed the license to see if the Commission had ordered additional actions. In the five pending cases, we reviewed the proceedings to see if the Commission had requested additional actions.

The 19 case files reviewed were voluminous and because of the time constraints of the request, we were able to perform only a cursory review of each. Consequently, we may not have extracted all the relevant case file information.

As you requested, we did not obtain agency comments. Except as noted above, we made our review in accordance with generally accepted government auditing standards. Our work was conducted from April 16, 1984, through May 10, 1984.

RELICENSING CASES WITH COMPETITION

We reviewed nine competitive relicensing cases and observed that, in five cases, amendments to the original applications were submitted after competing applications had been filed for the same project. No amendments were found on the remaining four cases. The Commission has not issued a license on any of these nine cases.

In three of the five cases with amendments, we noted that the private utilities upgraded power operation plans after the competing license applications had been filed:

- --In one of these three cases, a private utility, in its initial application, stated that the existing project made full use of all the water available for power production at that point of the river, and it knew of no further development of the project that would be economically attractive. However, two public utilities individually filed competing applications: one proposed to increase the project's capacity[1] by 25,516 kilowatts (kw); the other did not propose any increase in capacity. The private utility then amended its application and proposed an additional $56 million investment for power development which would increase the capacity by 46,100 kw. Subsequently, the two competing public utilities filed a consolidated application for this project, at which time they proposed to increase the capacity by 66,080 kw.
- --In the second case, a private utility amended its application to increase the project's dependable capacity by 14,000 kw. This amendment was submitted after a competing application was filed that would have increased the project's capacity.
- --In the third case, the private utility amended its application to expand the capacity of the project by about 34,600 kw after the competing applicant proposed to increase the capacity of the project.

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[1] Capacity is the capability of the power generator, expressed in kilowatts.

In the two other cases where amendments were submitted after competing applications had been filed, we noted that the recreational plans were upgraded. One private utility did not include any plans for recreational facilities in its initial application for a relicense. In a competing application, a municipality proposed recreational improvements, including a sports area, a fishing deck accessible to the handicapped, and adequate parking. The private utility subsequently amended its application to also provide recreational facilities, including the construction of day-use areas, pathways, fishing decks, and parking areas. In the second case, the private utility also amended its initial relicense application to include major recreational improvements after a competing application was filed which contained recreational improvements.

In addition to the above five cases, we noted that a competing applicant proposed improvements to a project's environmental plan that were not in the licensee's application. In its original relicense application, a private utility had stated that since no significant changes were to be made in the project's operation, there would be no changes in the fish, wildlife, or botanical resources in the project area. However, a public entity submitted a competing license application laying out ways to enhance the project's recreational and fisheries facilities where possible. The plan called for changes in the operating plan to capture and release water in order to enhance conservation of the resource. This would release water at a more uniform rate each month of the year consistent with safety from flooding and ability to capture and utilize as much natural flow as possible. The private utility has not submitted an amended application.

RELICENSING CASES NOT INVOLVING COMPETITION

We reviewed 10 uncontested cases, (5 pending and 5 issued) and observed that the Commission did require improvements to the operations of existing facilities during the relicensing proceedings. Based on our cursory review, we did not find where the applicants had filed any amendments to their applications. The discussion that follows presents some examples from the case files where the Commission required improvements.

We noted that in issuing the new licenses, the Commission placed stipulations on the licensees that they incorporate certain improvements to the projects. For example, in three of the five issued licenses, the licensees were directed by the Commission to take the following types of actions.

--Prepare a detailed fish and wildlife plan describing the current programs and future enhancement and protective measures.

--Prepare an amended recreational plan which shall include an assessment of the need for additional public access to the project.

--Determine the minimum stream flow requirements at the dam site needed to protect the downstream aquatic habitat.

--Prepare a report on potential adverse environmental impacts concerning flood plain management.

--Amend a recreational plan.

--Conduct a water temperature monitoring program.

We also noted that, during its review of the five pending license applications, the Commission requested additional information from two of the applicants. For example, the Commission requested that:

--A water management plan be prepared to ensure protection and enhancement of water quality, fish and wildlife resources, and recreational resources.

--A comprehensive cultural resource management plan be prepared for historical preservation purposes.

--Information be provided on the safety measures that were needed if a boat launching site was developed upstream from the dam site.

- - - -

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 7 days from its issue date. At that time, we will send copies to interested parties and make copies available to others upon request.

Sincerely yours,

for

J. Dexter Peach
Director

Enclosures

COMPETING LICENSE APPLICATIONS REVIEWED BY GAO

Licensee/applicant[a]	Project no.	Date filed
Weber (2,500 kw, Weber River, Utah)		
Utah Power & Light Co.	P-1744	6/69
City of Bountiful, Utah	P-2747	7/74
Mokelumne (190,800 kw, Mokelumne River, Calif.)		
Pacific Gas & Electric Co.	P-137	12/72
City of Santa Clara	P-2745	4/74
Olmsted (12,700 kw, Provo River, Utah)		
Utah Power & Light Co.	P-596	4/75
City of Bountiful, Utah	P-4040	1/81
Utah Municipal Power Agency	P-4029	1/81
Shawano (640 kw, Wolf River, Wisc.)		
Wisconsin Power & Light Co.	P-710	11/76
City of Shawano	P-2865	8/78
Rock Creek-Cresta (182,000 kw, North Fork Feather River, Calif.)		
Pacific Gas & Electric Co.	P-1962	9/79
Northern California Power Agency	P-3223	6/80
Sacramento Municipal Utility District	P-3177	12/80
Phoenix (1,600 kw, Stanislaus River, Calif.)		
Pacific Gas & Electric Co.	P-1061	12/79
Tuolumne Water District	P-4039	3/81
Rush Creek (8,400 kw, Rush Creek, Calif.)		
Southern California Edison Co.	P-1389	12/81
June Lake Public Utility District	P-6930	12/82
Poole (10,000 kw, Lee Vining Creek, Calif.)		
Southern California Edison Co.	P-1388	12/81
City of Vernon, Calif.	P-7263	5/83
Haas-Kings River (179,100 kw, Kings River, Calif.)		
Pacific Gas & Electric Co.	P-1988	3/82
Sacramento Municipal Utility District	P-6729	9/82

[a] Original licensee is listed first; competing applicant follows.

UNCONTESTED APPLICATIONS REVIEWED BY GAO

Project/applicant	Project No.	Date license application was filed	Date license issued
Green Island (6,000 kw, Hudson River, New York) Niagara Mohawk Power Corp.	P-13		2/77
Balch (133,200 kw, North Fork Kings River, California) Pacific Gas and Electric Co.	P-175		4/80
Soda (14,000 kw, Bear River, Idaho) Utah Power & Light Co.	P-20		7/80
Carpenter-Remmel (10,000 kw, Ouachita River, Arkansas) Arkansas Power & Light Co.	P-271		7/80
Conowingo (474,480 kw, Susquehanna River, Maryland) Susquehanna Power & Philadelphia Electric Power Companies	P-405		8/80
Lundy (3,000 kw, Mill Creek, California) Southern California Edison Co.	P-1390	12/81	
Buzzard Roost (15,000 kw, Saluda River, South Carolina) Greenwood County, South Carolina	P-1267	12/81	
Yates Project (32,000 kw, Tallapoosa River, Alabama) Alabama Power Co.	P-2407	9/82	
Thurlow Project (58,000 kw, Tallapoosa River, Alabama) Alabama Power Co.	P-2408	9/82	
Millville Hydro Station (2,840 kw, Shenandoah River, West Virginia) Potomac Edison Co.	P-2343	9/82	

Exhibit B

AMERICAN PUBLIC POWER ASSOCIATION

2301 M STREET NW WASHINGTON DC 20037 • 202/775-8300

April 3, 1985

MEMORANDUM

RE: Impact of S. 426 on Competition for Existing Hydroelectric Projects

This memorandum examines whether applicants other than the current license holder would be permitted to compete for an existing hydroelectric project upon the expiration of its license under the legislation proposed by Senator Wallop (S. 426) and Representative Shelby (H.R. 44).

The Wallop/Shelby bill would effectively eliminate competition for existing hydroelectric projects. The bill would replace the present competitive process with what amounts to a "sole source" bidding procedure involving the existing licensee and no one else. Only in the unlikely event that the Commission determined that the existing licensee's proposal did not meet the requirements of the Federal Power Act, or could not be amended to meet these requirements, would the Commission then consider an application submitted by another applicant. Therefore, the numerous benefits which result from the present competitive relicensing process, including increased generation, energy efficiency, and environmental improvements, would be lost if the Wallop/Shelby bill is enacted.

Section I of this memorandum outlines how current law provides for competition between applicants for hydroelectric licenses. Section II examines the impact of the Wallop/Shelby bill on this process.

I. Competition for Existing Hydroelectric Projects Under Current Law

Competition for existing hydroelectric projects is governed by sections 7 and 15 of the Federal Power Act (the "Act"), 16 U.S.C. §§ 800 and 808. Section 15 provides, in pertinent part:

> "[I]f the United States does not, at the expiration of the original license, exercise its right to take over, maintain, and operate any project or projects of the licensee . . . the Commission is authorized to issue a new license to the original licensee upon such terms and conditions as may be authorized or required under the then existing laws or regulations, or to issue a new license under said terms and conditions to a new licensee . . . ." 16 U.S.C. § 808(a) (emphasis supplied).

This section explicitly authorizes the Federal Energy Regulatory Commission (the "Commission") to consider, at the expiration of the original license, applications from both the original licensee and from competing applicants.

The standard for choosing between competing applicants is provided in section 7 of the Act. Section 7 states that, in issuing licenses under section 15 of the Act

> "the Commission shall give preference to applications therefor by States and municipalities, provided the plans for the same are deemed by the Commission equally well adapted . . . to conserve and utilize in the public interest the water resources of the region; and as between other applicants, the Commission may give preference to the applicant the plans of which it finds and determines are best adapted to develop, conserve, and utilize in the public interest the water resources of the region . . . ." 16 U.S.C. § 800(a).

Thus, under section 7, the Commission is authorized to award the license to the applicant whose plans are "best adapted" to the purposes of the Federal Power Act. In the case of a tie between a private applicant and a State or municipal applicant, section 7 requires that the license to utilize the public resource be awarded to the public entity.[1]

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[1] The applicability of the preference clause of section 7 to the issuance of new licenses for existing hydroelectric projects is the subject of litigation. In 1980, FERC held that the preference did apply in relicensing and in 1982, the Court of Appeals affirmed. Alabama Power v. FERC, 685 F.2d 1311 (11th Cir. 1982).

[Footnote continued on following page]

Under present law, section 10 of the Act, 15 U.S.C. § 803, only comes into play after the Commission has selected pursuant to section 7 the applicant with the "best adapted" plans for a project. At that time, section 10(a) authorizes the Commission to impose additional conditions on the license to assure

> "[t]hat the project adopted, including the maps, plans, and specifications, shall be such as in the judgment of the Commission will be best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce, for the improvement and utilization of water-power development, and for other beneficial public uses, including recreational purposes . . . ." 16 U.S.C. § 803(a).

Section 10(a) also empowers the Commission, if necessary, "to require the modification of any project and of the plans and specifications of the project works before approval." Id.

Under present law, section 10(a) has no bearing whatsoever on the competition between applicants for

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[Footnote 1 continued from preceding page]
In 1983, FERC reversed itself and held that the preference did not apply. That decision is presently on appeal to the Court of Appeals for the District of Columbia Circuit.

existing hydroelectric projects. As noted, the competitive process is governed by sections 7 and 15. Section 10(a) comes into play only after the new license has been chosen. It simply authorizes the Commission to place such additional conditions on licensees as it deems appropriate.

II. The Wallop/Shelby Bill Would Eliminate Competition For Hydroelectric Projects

The Wallop/Shelby legislation would make two principal changes in existing law with respect to the right of entities, other than the existing licensee, to compete for a new license for an existing project.

First, section 2 would eliminate the language "and in issuing licenses to new licensees under section 15 of this title" which is currently contained in section 7 of the Act. Thus, neither the municipal preference nor the licensing standards of section 7 would be applicable in issuing new licenses for existing hydroelectric projects.

Second, section 3 of the Wallop/Shelby bill would effectively create an exemption from competitive relicensing proceedings for an existing licensee. Rather than permitting the Commission to consider license applications from both existing licensees and competing applicants and to select the best plan, as the law presently provides, the Wallop/Shelby bill, if enacted, would require that the Commission

> "shall issue a new license to the existing licensee upon such terms and conditions as may be authorized or required under the then existing laws and regulations unless the Commission determines, taking into account public benefits provided during the proceeding license term, that such licensee's project or projects, as described in its application for a new license, will not meet the licensing standards set forth in section 10(a)." (Emphasis supplied.)

Only if the Commission determines that the project does not meet such standards may it consider license applications from other applicants. The section-by-section analysis accompanying the Wallop/Shelby proposal explains:

> "The amendment authorizes the Commission to consider other applications and issue a license to a different licensee if the Commission determines that the project or projects as proposed by the existing licensee do not meet the prescribed standards. (Emphasis supplied.) Cong. Rec. E 5708 (Nov. 18, 1983 daily ed.)

Under the procedure contemplated by Wallop/Shelby, a competing applicant with a superior plan would not even be considered by the Commission if the existing licensee's application meets the prescribed standards or can be amended to meet those standards. Thus, the existing competitive provisions (sections 7 and 15) of the Federal Power Act would effectively be bypassed except for those circumstances in which the existing license refuses to meet additional requirements imposed by FERC.

As noted above, the prescribed standards in section 10(a) of the Act have nothing whatsoever to do with competition. They merely authorize the Commission to impose license conditions sufficient to assure that the project operates adequately in the public interest. In most cases, an existing licensee will have little difficulty proposing such a plan in its license application or amending its application at the request of the Commission. There will be no opportunity for competing applicants to present their plans to the Commission. Therefore, the unambiguous effect of the Wallop/Shelby bill would be to deprive both the Commission and the public of the improvements in power production, energy efficiency, and environmental protection which have resulted from "bidding" between competing applicants in currently pending relicensing proceedings.

Senator MURKOWSKI. Our next witness is Mr. Robert McKinney, general manager of the Cowlitz County Public Utilities District in Longview.

STATEMENT OF ROBERT L. McKINNEY, GENERAL MANAGER, COWLITZ COUNTY PUBLIC UTILITY DISTRICT

Mr. McKINNEY. Thank you, Mr. Chairman, Senator Evans.

My name is Robert L. McKinney and I am the general manager of the Cowlitz County Public Utility District in the State of Washington.

In 1977, the Cowlitz PUD together with its neighboring public utility district of Clark County jointly applied under the name Clark-Cowlitz Joint Operating Agency, to be called CCJOA, for the new license to operate the hydroelectric facility at Merwin Dam.

Merwin Dam is located on the Lewis River, which is the common boundary between our two counties, and is currently operated by the Pacific Power & Light Co. The power output of Merwin is sent to Pacific Power customers located outside of the Lewis River basin.

As one of two competing applicants involved in the *Merwin* relicensing case, which is now on appeal and is awaiting decision by the District of Columbia circuit, CCJOA is of course vitally interested in the proposed relicensing legislation.

As demonstrated by the witnesses here this morning, the investor-owned utilities are working hard to create the perception that the existing law is uncertain and needs clarification. In my opinion, any uncertainty which exists in the law today exists only because the FERC in the *Merwin* case indefensibly reversed itself and an earlier holding of the 11 Circuit Court of Appeals on relevant issues.

Therefore, it is our view that the best congressional course at the present time is to await the benefit of whatever ruling the courts may have on the existing law, and certainly before we begin acting on new law. It is CCJOA's view that changing the existing law does not represent the best way to further the public interest, because each of the proposed bills, however well meaning, in one way or another would eliminate or drastically reduce competition on relicensing. The Power Act's existing terms were well conceived to promote relicensing competition, which in turn provides substantial public benefits.

As our experience in the *Merwin* case vividly demonstrates, relicensing competition does enhance the project proposals in all aspects, including environmental. Finally, existing law offered the people of Clark and Cowlitz Counties in southwest Washington a window at the time of relicensing and an opportunity to have a meaningful input to effectively participate in the disposition of water resources located in our service area, related to fish and wildlife, flood control, recreational concerns, which at some times can be as important as the benefits of power production.

Thus, the proposed bills would alter a statutory scheme that has worked well to promote competition in favor of one which I believe will eliminate or greatly reduce competition and effectively relinquish a public resource for private use in perpetuity.

The investor-owned utilities offer unsupported arguments in defense of perpetual licensing. They claim that their customers will suffer severe economic hardship upon a license transfer. But our experience in Merwin proves otherwise. Pacific Power & Light Co. in the Pacific Northwest region has a surplus of generation and will have for a good many years to come.

A license transfer is a zero sum game, and by reason of a license transfer it doesn't necessarily create the need to build a new powerplant. Furthermore, the facts are that the provisions of our Pacific Northwest Regional Power Act insulate all of Pacific's residential and farm customers within the Pacific Northwest region from rate impacts due to a change in its power resource mix.

Similarly unjustified is the investor-owned utilities' demand for just compensation upon a license transfer. The demand for just compensation is based on the investor-owned utilities' misperception that they hold an ownership rather than a leasehold interest in the project.

Let me emphasize that the net investment compensation payable is the same amount that the Federal Government would have to pay if it recaptured a federally licensed project. Increasing the Power Act's relicensing compensation, in my view, would serve primarily to deter competition, at least to some degree, for a new license.

With respect to the merits of each of the four bills now before the subcommittee, there is a simple and straightforward test. That is, just ask yourself, if that particular bill had been in place in 1977 would there have been any competition for Merwin Dam? The answer, in the case of S. 426 and S. 403, is an emphatic no. The answer for S. 1219 is that such competition would have been very unlikely. The answer for S. 1260, which has just been introduced and has been offered with certain provisions intended as vehicles for discussion, must await a further analysis, which we plan to do.

I want to close this short summary statement by emphasizing our feeling that, after 9 years of competing for the Merwin license under the existing provisions of law, it would be grossly unfair to change the rules governing that competition.

Thank you very much, Mr. Chairman. I have submitted a complete statement for the record and I'm available for questions.

[The prepared statement of Mr. McKinney follows:]

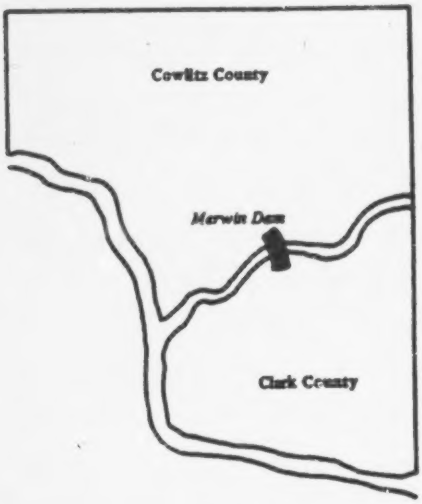
U.S. SENATE
SUBCOMMITTEE ON WATER AND POWER
COMMITTEE ON ENERGY AND NATURAL RESOURCES
HONORABLE FRANK H. MURKOWSKI, CHAIRMAN

STATEMENT OF ROBERT L. McKINNEY

GENERAL MANAGER OF COWLITZ COUNTY PUBLIC UTILITY DISTRICT

ON

S. 403, S. 426, S. 1219 AND S. 1260


Cowlitz County
Merwin Dam
Clark County

JUNE 11, 1985

BEFORE THE
SENATE SUBCOMMITTEE ON WATER AND POWER
COMMITTEE ON ENERGY AND NATURAL RESOURCES

STATEMENT OF ROBERT L. McKINNEY

SUMMARY

Mr. Chairman and members of the Subcommittee my name is Robert L. McKinney and I am General Manager of the Cowlitz County Public Utility District in the State of Washington. In 1977 the Cowlitz PUD, together with its neighboring Public Utility District of Clark County, jointly applied under the name Clark-Cowlitz Joint Operating Agency (CCJOA) for the new license to operate the hydroelectric facility at Merwin Dam. Merwin Dam is located on the Lewis River which is a common boundry between our two counties and is currently operated by the Pacific Power & Light Company. The power output of Merwin is sent to PP&L customers located outside the Lewis River Basin. As one of two competing applicants involved in the Merwin relicensing case, which is awaiting decision on Appeal by the District of Columbia Circuit, CCJOA is of course vitally interested in the proposed relicensing legislation.

The investor owned utilities have been working hard to create the perception that the existing law needs "clarification" as they call it, but the Subcommittee has before it proposed legislation which in my opinion will not simply clarify - but instead will change fundamental principles of the Federal Power Act. The IOU's are encouraging an effort to change the law under which they accepted their licenses from the United States.

The "uncertainty" which exists in the law today exists only because FERC in the Merwin case indefensibly reversed itself and an earlier holding of the 11th Circuit Court of Appeals on the relevant issues. This unwarranted misstep by FERC should be corrected by the court which is currently considering the matter. It is our view that the best Congressional course at the present time is to allow that to happen and to await the benefit of whatever ruling the courts may offer before acting. CCJOA is therefore not supporting any of the bills at the present time.

It is CCJOA's view that changing the existing law does not represent the best way to further the public interest because each of the proposed bills, however well meaning, in one way or another would eliminate or drastically reduce competition on relicensing. The Power Act's existing terms were well-conceived to promote relicensing competition which, in turn, provides substantial public benefits. As our experience in the Merwin case vividly demonstrates, relicensing competition does enhance the project proposals in all aspects including environmental. In the longer term, relicensing competition helps improve conditions in the market place for all consumers of electric power. Dr. Wilson will explain this in more detail in his testimony which follows mine. Finally, existing law offered the people of Clark and Cowlitz Counties at the time of relicenising the meaningful opportunity to effectively participate in the disposition of the water resources as to fish and wildlife, flood control and recreational concerns which can be as important as the benefits of power production.

Thus the proposed bills would alter a statutory scheme that has worked well to promote competition in favor of one which I believe will eliminate or greatly reduce competition and effectively relinquish a public resource for private use in perpetuity. The IOU's offer unsupported arguments in defense of perpetual licensing. They claim that their customers will suffer severe economic hardship upon a license transfer. But our experience in Merwin proves otherwise. PP&L has a surplus of generation and will have for a good many years to come. Furthermore the facts are that the provisions of the Pacific Northwest Regional Act insulate all of Pacific's residential and farm customers within the Pacific Northwest Region from rate impact.

Similarly groundless is the IOU's demand for "just compensation" upon a license transfer. The demand for just compensation is based on the IOU's misperception that they hold an ownership, rather than a leasehold, interest in the project. And let me emphasize that the "net investment" compensation payable under the FPA to an existing license upon recapture by a state or municipality is the same value which the federal government would have to pay if it recaptures a federally-licensed project. Increasing the Power Act's relicensing compensation would serve primarily to deter competition for the new license.

In short I do not think the public interest will be benefitted by changing the existing law.

With respect to the merits of each of the four bills now before this Subcommittee there is a simple and straightforward test. That is, ask yourself - if the bill had been in place in 1977 would there have been any competition for Merwin Dam? The answer in the case of S.426 and S.403 is an emphatic No ! The answer for S.1219 is that such competition would have been very unlikely. The answer for S.1260, which has just been introduced and has been offered with certain provisions intended as vehicles for discussion, must await further analysis.

The proposed legislative changes concerning this important disposition of a public resource should not apply to a competition such as Merwin which has proceeded for 9 years under the provisions of existing law. We have invested considerable time, effort and public monies in pursuant of the Merwin license and its benefits for all our constituents. We have litigated the applicability of public preference on relicensing all the way to the U.S. Supreme Court. We have tried the merits of our Merwin project plans before an FERC administrative law judge, as well as before the Commission itself. Finally, we have briefed and argued the case now in the U.S. Court of Appeals.

After 9 years of competing for the Merwin license under existing provisions of law it would be grossly unfair to change the rules governing that competition.

THE EXISTING LAW PROMOTES RELICENSING COMPETITION — A SOUND POLICY

There is no reason to change the terms of the bargain struck in the 1920 Power Act because the law still makes good sense. Through the tie-breaking public preference the Power Act encourages relicensing competition, which has several salutary purposes.

1. Competitive relicensings lead to enhanced projects for the public. The Merwin case offers a vivid illustration of this point.

When the Merwin project was originally licensed, it was generally understood that Merwin would be used to serve the electric needs of southwest Washington. However, after the subsequent formation and commencement of operation by Cowlitz and Clark PUD's, Merwin's power output was thereafter unavailable for use in Clark and Cowlitz Counties. For the duration of the Merwin 50-year license term the project has been operated by the Pacific Power & Light Company and its low cost power has been used to serve loads outside the Lewis River Basin, and even outside of the Pacific Northwest region to further and further reaches as PP&L assumes more and more service territory by Corporate mergers. Meanwhile the people of southwest Washington have been without the benefit of Merwin's power.

In 1976 the Clark and Cowlitz PUDs, aware of the imminent expiration of the Merwin project license, considered whether to recapture the project for the benefit of the people of southwest Washington. We felt well qualified to compete for the license. Together CCJOA's two constituent public utility districts had substantial utility experience over several decades, had served in excess of 118,000 customers who could utilize the entire Merwin output, and already held a FERC license for a hydroelectric project on the Lewis River operated in coordination with Merwin. Moreover, in contrast to the prior licensee's operation of Merwin, CCJOA would operate Merwin on a less costly, non-profit basis for consumers in Clark and Cowlitz Counties and assure local control over the use of the project's water resources for other purposes such as recreation, flood control, and fish and wildlife concerns. In all these respects we felt our project plans to be at least equal to the competition (a belief later confirmed by the findings of both the administrative law judge and the Commission). Nevertheless, absent the clear expression in the Act (and its legislative history) strongly favoring the licensing of public entities like CCJOA, we could not have justified the expense and effort of competing for the license. In short, it was the Act's municipal preference, which applies only as a "tiebreaker" when the municipal applicant has demonstrated its plans to be at least equally adapted to those of the private utility, and the municipality's last right to amend which were essential in encouraging our competition for Merwin.

Later CCJOA's decision to compete in Merwin was bolstered by FERC's confirmation of the Power Act's terms. In Bountiful (11 FERC (CCH) ¶61,337 (1980)) FERC rejected claims by private utilities that there was effectively no public preference on relicensing. And in another case (Escondido, 9 FERC (CCH) ¶61,241 (1979)) FERC rejected claims that an ex-licensee was entitled to compensation in excess of its unrecovered investment. Again I stress that without the Power Act's incentives, CCJOA would not today be competing for the Merwin license.

Just as the Power Act's incentives proved effective in stimulating competition on relicensing, so too did that competition prove effective in stimulating the best possible plans for the Merwin license. Only after the prodding of competition did PP&L propose improvements to its prior stewardship in such areas as fisheries, wildlife, flood control and recreation. Even then, the FERC administrative law judge found in connection with the respective recreation proposals that CCJOA's proposal "may, in the end, lead to better and more extensive public use of the project's facilities." Moreover, the evidentiary hearing engendered by CCJOA's competition enabled the State of Washington Department of Fish and Game to play a more meaningful role in fashioning the license ultimately issued — a role which led to agreements with respect to both fisheries and wildlife mitigation. In sum, the unmistakable result of CCJOA's competition in Merwin is a better project than had existed for the past 50 years.

2. Less obvious but no less significant, relicensing competition (or at least the threat of it) is imperative to the long term goal of assuring a competitive marketplace for the sale of electricity. Dr. Wilson's testimony elaborates on this.

3. Finally, the competition in Merwin is a very relevant illustration of how the Act allows the people of a river basin a realistic opportunity at the time of relicensing to seek to exercise local influence over use of a water resource, particularly where local uses of the water for purposes other than power production are important. While it is of course true that the use of a particular stream to develop power is generally of interstate character within the federal domain, it is also true that most of the possible uses of that same water resource — such as irrigation, flood control, consumptive use and recreation — involve local resource concerns and should be subject to local priorities.[1] Surely the virtue recognized in the 1920 Power Act of local control over water resources remains today. Further, it is quite possible that, over time, concerns for water supply or irrigation might approach the importance of power, thus increasing the significance of local control over water resources. Congress therefore should not enact changes to existing law which would substantially diminish the opportunity for meaningful local participation on relicensing.

4. Against these positive aspects of competitive relicensings, the IOUs offer two basic arguments in support of perpetual licenses.

(a) The IOUs claim that it is unfair to grant a license to someone new without compensating the ex-licensee for any increase in costs it may incur as a consequence of the transfer of the hydroelectric power resource. Such consequential damages are of course in excess of the compensation provided in the Power Act. [2]

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[1] O.C. Merrill, the Act's principal draftsman, recognized this. He explained to Congress that license issuance should take into account the utilization of "the full resources of that stream for every purpose [including] irrigation, water power, water supply navigation and whatever there may be." Hearings on H.R. 8716 before House Committee on Water and Power, 65th Cong., 2d Sess. 94-95 (1918).

The Power Act assures the ex-licensee a return of all the money invested and not already recovered in the form of depreciation. There is certainly nothing unfair to the ex-licensee in those terms — it recovers every dollar invested, in addition to all profits earned during the license term. In any event, that is the bargain struck by the licensee in accepting the license. It is fair to expect the licensee to honor that bargain.

To be sure, the value of hydroelectric energy has increased substantially over the license term; but that has to do with the value of the resource — the publicly owned flowing water — rather than any intrinsic worth of the facility, standing alone, constructed by the licensee. Why should the ex-licensee be compensated for an increase in the value of the resource that it never owned in the first place? That would be equivalent to a tenant paying a premium for a particularly attractive rental property to the prior tenant rather than to the landlord.

It may be true that the same faciltity would cost more today to construct than the new licensee will have to pay when it takes over the license. But that amounts to a benefit to the new licensee's customers, not a shortchanging of the ex-licensee which has recovered everything invested and accordingly has received the benefit of its bargain under the license. It has been argued that that benefit should be redirected to the ex-licensee's customers, whose rates might otherwise increase. But it is not clear that the federal government can assure that the ex-licensee's customers would actually be compensated, since that would be tantamount to dictating ratemaking terms to state commissions.

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[2] A summary of the Power Act's relicensing compensation scheme (i.e., net investment and severance damages) is attached as Appendix A. That summary synthesizes a vast legislative record devoted exclusively to that topic. The comprehensiveness of the Congress' consideration of "compensation" should give this Congress some pause before any rush to reverse the law. Moreover, the IOUs' revised compensation scheme — based on a claimed IOU-ownership interest in the license — would compel the federal government to compensate the ex-licensee upon federal recapture, just as a new licensee would be required to do upon license transfer. Again, it would seem contrary to the federal government's interest to sanction such a scheme.

Even if legislation could assure that this bonus compensation would flow through to the customers of the ex-licensee, the "fairness" of that endeavor is by no means clear to us. Why are the customers of the ex-licensee any more deserving of rate relief than the customers of the new licensee? The fact that the customers of the ex-licensee have lost a source of supply does not justify a cross-subsidization from the new beneficiaries of the supply to the old. If fairness dictates anything, it is that the new licensee's customers should be entitled to all benefits attending the new license — just as the ex-licensee's customers enjoyed all the benefits of the prior license for 50 years. To do otherwise essentially assumes that an existing licensee has rights to something more than a 50 year license.

(b) The IOUs also argue that the "economic impact" of a license transfer to the existing licensee's ratepayers is so adverse that it compels reissuance of the license to the existing licensee.

Aside from the fact that relicensing is not an effective or valid mechanism for redistributing economic impacts,[3] a license transfer does not add to or subtract from the existing pool of power resources, it merely transfers stewardship of an existing resource. To the overall consuming public, therefore, a license transfer is a "zero sum game."

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[3] There are other factors having a substantially larger bearing on the distribution of customer rate impacts such as the residential exchange provisions under the Pacific Northwest Regional Act and the benefits of cost effective utility weatherization programs, and treatment of construction work in progress (CWIP).

Nor is there necessarily any need, as the IOUs routinely claim, for the ex-licensee to replace the generation of a project transferred to someone else. Where, for example, the ex-licensee previously served the new licensee with power from the licensed project or where, as in Merwin, the ex-licensee (and the Pacific Northwest Region) has a surplus of power, there would be no need to construct new power plants to replace transfered generation.

Instead, all that is likely to be involved is a relatively minor change in the mix of a utility's resources, resulting in a relative minor change, if any, in the rates its customers pay. [4] In Merwin, for example, Pacific Power & Light admitted that its customers' "projected rates [for the next ten years] would not be expected to change significantly with or without the Merwin project as a system resource." The evidentiary record confirmed that the vast majority of PP&L's residential and small farm customers would not be affected whatsoever by the relicensing of Merwin to CCJOA. Only a relatively few residential customers, all located far outside the Merwin dam region, would incur any increase at all, and then only amounting to 1.7-2.5% ($4.30 to $4.46 per year). PP&L's commercial and industrial customers could incur an increase of no more than 1.5 to 2%. [5] This virtually imperceptible impact on a relatively few individual customers of PP&L is contrasted with significant per capita savings to the residential customers of the Clark and Cowlitz PUDs.

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[4] APPA has provided some perspective to the private utilities' claims of cataclysmic effects of the relicensing preference. For instance, only 2.68% of total private power company generating capacity is from federally-licensed hydroelectric projects; since 1978, 126 relicensing cases have come before FERC and 86 of these were relicensed to their original operator; of the 40 relicensing cases presently before FERC only 10 involve public-private competition, and these 10 involve only 1.2% of all licensed project capacity. See also footnote 3.

[5] The Merwin record also revealed that, in contrast to this one time increase on PP&L's commercial and industrial customers, the Oregon Public Utility Commissioner has imposed rate increases on commercial and industrial customers in Oregon amounting to a compounded annual rate of 13% in every year since 1970.

Against that Merwin backdrop, it becomes obvious that the IOU's have grossly overstated relicensing impacts on customers. Certainly there is no reason to conclude that a de minimus impact on some customer's rates should foreclose forever the demonstrated benefits of relicensing competition.

IT IS UNFAIR TO CHANGE THE PROVISIONS OF THE ACT

The IOUs each accepted their licenses with the understanding that the term was limited and that the new license very well might be awarded to a local municipality following the Power Act's preference. This is based not just on a fair reading of the Power Act, but also for instance on the actual words of an IOU spokesman during the 1920 Power Act's hearings. John Britton, Vice President and General Manager of the Pacific Gas & Electric Company, said:

> I think that at that time, 50 years from now, we will find that the Government will be very glad to take it [the project] over for the purpose of turning it over to a municipality . . . . The Government don't [sic] have to take it over and I don't believe it will, but I do believe that most of these plants erected under these licenses, where they are applicable to a growing community, will be taken over by municipalities and operated by them, and not by the lessees.
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> If he [the original licensee] is making a paying business out of it the Government will undoubtedly give preference at the end of the time, if he is making a good profit on it, to a municipality or somebody else who might want it and whom the Government preferred . . . .

On the other hand municipalities like CCJOA have relied on the existing law as providing them an opportunity to compete for the project. It is grossly unfair to change rules after a game begins, particularly if the game is substantially complete as in Merwin. We have invested considerable time, effort and public monies in pursuit of the Merwin license and its benefits for our constituents. We have litigated the applicability of public preference on relicensing all the way to the Supreme Court. We have tried the merits of our Merwin project plans before a FERC judge as well as before FERC itself, and we have briefed and argued the case now in the court of appeals. Any new legislation which at this late date undermines our efforts with respect to the Merwin licensing is grossly unfair.

APPENDIX A

COMPENSATION UNDER THE FEDERAL POWER ACT

Section 15 of the Power Act provides that upon issuance of the Merwin project license to JOA the JOA "shall, before taking possession of [Merwin], pay such amount . . . as the United States is required to do, in the manner specified in Section 14" of the Act. Section 14, in turn, defines the "manner" of such payment of follows:

> [B]efore taking possession it [the United States] shall pay the net investment of the licensee in the project or projects taken, not to exceed the fair value of the property taken, plus such reasonable damages, if any, to property of the licensee valuable, serviceable, and dependent as above set forth but not taken, as may be caused by the severance therefrom of property taken . . . . The net investment of the licensee in the project or projects so taken and the amount of such severance damages, if any, shall be determined by the Commission after notice and opportunity for hearing. Such net investment shall not include or be affected by the value of any lands, rights-of-way, or other property of the United States licensed by the Commission under this Act, by the license or by good will, going value, or prospective revenues; nor shall the values allowed for water rights, rights-of-way, lands, or interest in lands be in excess of the actual reasonable cost thereof at the time of acquisition by the licensee . . . .

16 U.S.C. § 807(a).

There are two elements of compensation involved under section 14. These are (1) "net investment", which contemplates compensation for property taken generally to permit the licensee to recover its undepreciated or net investment in the project; and (2) "severance damages", which contemplates compensation for damage to property not taken but impaired as a result of the recapture. Together these two concepts comport with the basic compromise struck by the Act. They provide sufficient guarantees to attract investment while safeguarding the public against profiterring.

The Federal Power Act was the product of lengthy debate between the conservationists and the private power interests. One of the principal battles joined between these two competing interests was over the terms of compensation upon recapture of a project whose license had expired. The conservationists argued that if the terms and conditions governing recapture were made too harsh, the recapture right would be impossible to exercise, and the license granted would, in effect, be perpetual. Kerwin, Federal Water-Power Legislation, Columbia University Press (1926) at 195, 240. The private power interests, on the other hand, claimed that if the recapture terms operated to deny potential developers sufficient compensation for their investment, they would be discouraged from venturing capital on hydroelectric projects. Kerwin, 105-170.

The first water power legislation proposed by the power interests included recapture cost provisions that were quite broad compared to the legislation that ultimately passed. See section 10 of the "Adamson" bill, H.R. 16053, 63d Cong., 2d Sess. (1914). There ensued a battle on two fronts: 1) the extent of the property required to be taken on recapture, and 2) the method by which the property taken would be valued.

As proposed by the power interests a new licensee would have been required to pay compensation not only for the original licensee's project works but for additional dependent property as well. [1] The conservationists insisted that such a requirement was too onerous and effectively precluded recapture. [2]

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[1] The "Adamson" bill, H.R. 16053, of 1914 provided that the licensee would take over:

> [A]ll property dependent in whole or in part for its usefulness upon the rights hereby granted, which shall include all necessary and appurtenant property created or acquired and valuable and serviceable in the distribution of power, and all other property belonging to the grantee, the value and usefulness of which would be destroyed or seriously impaired by such termination.

To the same effect was the "Shields" bill, S. 3331, 64th Cong., 1st Sess. (1916). A witness representing a major utility testified that every part of the utility's plant was dependent on every other part, thereby requiring a takeover of the entire utility. Hearings on H.R. 16673 before the Senate Committee on Public Lands, 63d Cong., 3d Sess. 106 (1914-15).

[2] For example, Representatives Kent and Stevens complained that the original licensee would have to be compensated for "entire manufacturing plant[s]" and down to the "last trolley car." 51 Cong. Rec. 12569 and 12778 (1914).

The conservationists also objected to the method of valuing the property taken. The proposed legislation required the payment of "fair value" for the property recaptured — i.e., the traditional method of compensation in condemnation proceedings.[3] The conservationists proposed instead that for rights-of-way, water rights and interests in land, the new licensee should pay "actual cost," while for structures, facilities and equipment, he should only pay "fair value" at the time of the taking. "Ferris" bill, H.R. 14893, 63d Cong., 2d Sess. (1914). Their rationale was that land and water rights involved in a licensed project, spurred by the hydroelectric development, were likley to appreciate in value while the physical facilities, owing to wear and tear, were likely to depreciate. Hearings before House Committee on Public Lands on H.R. 14893, 63d Cong., 2d Sess. 200 (1914). Since the public loaned to the licensee the use of the resource, the public should not have to compensate the licensee for the value of that resource in order to get it back.

To facilitate the enactment of water power legislation, the Wilson Administration (under the lead of Mr. O.C. Merrill) prepared a bill. The recapture cost provisions of that bill, drafted by Merrill and introduced in Congress by Rep. Raker (H.R. 8716), remained substantively intact through enactment to become section 14 of the Act. Accordingly, we look to the expressions of the drafters to understand the purposes of section 14's recapture cost provisions.

A memo suggesting these provisions was written by Merrill and approved by President Wilson, who told the Secretaries of War, Interior and Agriculture to draft a bill using the memo as a guide. Memorandum from O. C. Merrill, Chief Engineer of the Forest Service, to Secretary of Agriculture Houston. The memo suggested that the new licensee should pay "fair value not to exceed the actual cost" for the properties transferred plus reasonable compensation for the damage, if any, to remaining properties of the licensee occasioned by the severance of the property taken from the property not taken. Thus the administration bill, for the first time among the many prior water power bills, divided the traditional concept of "just compensation" into its two constitutent parts: (1) damages to property taken and (2) damages to property not taken (severance damages). As to property taken, compensation was limited to the "actual cost" of the property rather than to its market value, [4] and values which might normally be included as part of "just compensation" were expressly excluded under the bill. The bill provided (and the Act now provides):

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[3] The common law measure of compensation in a condemnation case (i.e., an eminent domain proceeding under the Fifth Amendment to the U.S. Constitution) includes damages equal to the value of property taken plus the diminution in value of what remains (commonly referred to as severance damages). United States v. Miller, 317 U.S. 369 (1942).

> [N]et investment shall not include or be affected by the value of lands, rights-of-way, or other property of the United States licensed by the Commission under this Act, by the licensee or by good will, going value, or prospective revenues; nor shall the values allowed for water rights, rights-of-way, land, or interest in lands be in excess of the actual reasonable cost thereof at the time of acquisition.

16 U.S.C. § 807(a)

According to the sponsors of the bill, the net investment provision assured the licensee a return of his invested dollars as well as the opportunity to earn a fair return on that investment, while at the same time limiting the public's recapture costs to something less than the "fair value" of the project.[5]

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[4] The term "actual cost" was later changed to "net investment" for purposes of clarity.

As to property not taken, compensation was left to those common law principles referred to as "severance damages" which are defined in the Act as:

> [S]uch reasonable damages, if any, to property of the licensee valuable, serviceable, and dependent as above set forth but not taken, as may be caused by the severance therefrom of property taken . . . .

16 U.S.C. S 807(a).

Again according to Merrill, the severance damages clause was necessary to the faithful protection of the takeover right since no municipal entity could reasonable be expected to take over an entire power supply system. What the municipality, state, or federal government was likely to require, Mr. Merrill reasoned, was a particular unit for a particular purpose, leaving the greater part of a utility's system intact. Speaking expressly to the severance damages clause, Mr. Merrill said that "a provision for partial purchase must be accompanied by payment of reasonable severance damages as a measure of protection to the investment." Memorandum of October 31, 1917. Thus, the acquiring entity pays for damages to the licensee's property, used incidential to the license, which is not taken but is rendered unusable (or of less value) for such purposes by the takeover.

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[5] Referring to these recapture cost provisions Merrill stated in a memorandum dated October 31, 1917:

> The above provision is sufficient fully to protect the investment of the licensee, while not permitting the capitalization of increases in land and water-right values — the "unearned increment" and not requiring the United States or any transferee to pay more for the property than it is reasonably worth.

It was assumed that "net investment" would be less than "fair value." But against the possibility of deflation or disaster the public was assured it would in any event pay no more than the "fair value" of property taken.

Taken together, these two notions amounted to something substantially less than compensation based on "fair value" that the earlier power trust-sponsored bills had contemplated. [6] The recapture cost provision went so far as to backstop investment dollars, but no further. This result made sense in the context of the Power Act's objectives: the recapture cost provisions offered security of investment capital to encourage development, and at the same time afforded the public a realistic opportunity to recapture its resources.

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[6] Indeed, section 14 specifically preserves the public's right to take over a project during the license term by condemnation "upon payment of just compensation." There would have been no reason for section 14's detailed provisions specifying recapture costs upon a license's expiration and the resultant, endless debates in Congress if those provisions were merely redundant to condemenation damages.

Senator MURKOWSKI. Thank you very much, Mr. McKinney. Dr. Wilson.

STATEMENT OF DR. JOHN W. WILSON, J. W. WILSON & ASSOCIATES, INC.

Dr. WILSON. Thank you, Mr. Chairman.

The statements presented this morning by the private utilities and their supporters fail to recognize or even address the key reason for public preference. The point is that public preference supports competition in the electric power industry. And today, more than ever before, greater competitive pressures are critically needed to reverse private utility inefficiencies and spiraling costs. Without the market competition that public preference will make possible, it will be the captive customers of private systems who will pay the greatest price over time.

The self-serving statements of the private utilities notwithstanding, they are here today seeking the elimination of competition. While they couch their plea in terms of protecting consumers, the truth is that by destroying competition the elimination of public preference will cost the consumers of these private power companies most of all.

Competition is not merely a current condition It is both a process and a state. The competitive and public policy forces at play in markets today will determine the competitive structure of markets and the welfare of consumers in the future.

If today's large investor-owned utilities are unleashed to go after smaller, less strategically advantaged public systems and the public systems have no strategic advantages of their own, today's competition will produce tomorrow's monopoly.

While the existence of public preference in hydrorelicensing would support greater public competition with investor-owned utilities, the elimination of preference in the name of leveling the playing field would instead level potential public competitors and destroy the competitive playing field.

While the level playing field analogy has its intuitive appeal in evaluating public preference it is misleading. When two matched teams take the field or two middleweights get into the ring, it may be anticompetitive to give a weapon to one, but that is not the case before us.

The Alabama Power Co. has assets of more than $6 billion. The municipal system in Foley, AL, has assets of $20 million. Niagara Mohawk has assets of $6 billion. The municipal system in Massena, N.Y. has assets of $10 million. And so it goes with most comparisons between public systems and their investor-owned rivals.

The relevant playing field on which competition is important is the marketplace where electric power is sold. Licensing itself is not the competitive playing field, but a means to improve competition through the exercise of public policy.

There are very few discretionary tools at your disposal to improve market competition. It would therefore be a horrible shame and a loss of an important opportunity to misunderstand the role of public preference and to mistakenly treat hydrorelicensing as the end in itself, rather than the means to the end. The end should be improved competitive conditions in electric power markets.

Focusing on competition in licensing itself misses the point. That's like arguing that David and Goliath should have first arm-wrestled, with the slingshot going to the winner. Goliath surely would have preferred that, not because it would have made him a better competitor but because it would have eliminated the competitive threat.

Without public preference, the pressure is off. The Goliaths can go on building their Seabrooks, Midlands, Diablo Canyons, Grand Gulfs, Shorehams, and the like without fearing that these commercial failures will be their undoing. Consumers served by these private utilities will have no options.

The competitive possibility of citizens forming a public system with the help of public preference will no longer be a worrisome threat. Overcoming a few regulators is much easier than overcoming effective competitors.

And what about the level of compensation that should be required when a site changes hands? There are two reasons why that should not exceed net book value. First, net book value is the maximum amount that a utility's owners would get if they were to retain the property as part of their utility rate base. Any payment in excess of net value would be an unwarranted windfall, in effect the type of excess profit that regulation is designed to prevent.

Second, even if payments exceeding net book value were to be flowed through to the utility's ratepayers, that would still be taxing away the future benefits of the hydrosite. At the extreme, payments based on replacement cost would constitute the full taxation and capture of the present value of all future net benefits of the original licensee.

While the original license may have had a fixed term, the economic benefits of the site under S. 426 would effectively accrue to the original licensee in perpetuity. Compensation based on replacement cost, as opposed to net book value, would effectively replace public preference with an absolute incumbent preference under which all site benefits past, present, and future would be attributed to the original licensee, whether his license was renewed or not.

In conclusion, some legislators may see a short-term attraction in stripping public preference out of hydrorelicensing if that will permit their local investor-owned utility to keep or acquire the benefits of a hydrosite, but that is casting the world as a zero sum game. The power industry and our economy are dynamic, and the benefits of maintaining competition over time are much greater than any short-term gain from strengthening a dominant monopolist. That would obviously be a bad political bargain.

It is also obvious that public preference is critical to the vitality of public competitors in the electric power industry. Likewise it is obvious that having viable competitors is a prerequisite to gaining the benefits of competition.

Finally, it is obvious that the benefits of competition are the dynamic market efficiencies and advancements that competition encourages over time, and not merely the lower prices that may exist at any moment in time. Competition will make life tough for the very inefficient utility monopolist in the short run, but it will make life better for all of us in the long run, whether we are served by public or private systems. That is also obvious.

Oliver Wendell Holmes once said that we need education in the obvious more than investigation of the abtruse. But in this case, may I suggest that education of the obvious is not enough. What we need most of all is the courage to act on it.

Thank you.

[The prepared statement of Dr. Wilson follows:]

U.S. Senate
Subcommittee on Water and Power
of the
Committee on Energy and Natural Resources
Honorable Frank H. Murkowski, Chairman

Statement of
Dr. John W. Wilson
Hearings on S.403, S.426, S.1219, S.1260

Washington, D.C.
June 11, 1985

J. W. WILSON & ASSOCIATES, INC.
ECONOMIC COUNSEL
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I would like to thank you, Mr. Chairman and members of the Subcommittee, for this opportunity to testify today on competition in the electric power industry and the importance of public preference in hydroelectric relicensing in that regard. My presentation is divided into three parts. First, I will explain why public preference in hydroelectric relicensing is an important and, in some cases, an indispensable tool for the improvement of competition in the electric power industry. Second, I will address several specific questions that have been raised in the debate over public preference in hydro relicensing. These include the question of property valuation and just compensation; why public preference is particularly important to consumers who are served by privately-owned utilities; why public preference is essential in order to make competition work; and why public preference is especially important to all consumers under today's circumstances in the electric power industry. Third, I will discuss the various ways in which competition improves performance and produces benefits for consumers served by both public and private systems in this heavily regulated industry.

Public Preference and Competition

Competition is both a process and a state; and, to complicate matters, a short-run adjustment in the process (even an intended improvement) may impair the future state. In other words, competition is not merely a static condition; it has a time-shape. The competitive forces (and also the public policy forces) at play in markets today will determine the competitive structure of markets in the future. If today's large investor owned utilities are unleashed to go after smaller, less strategically advantaged, publicly-owned systems, and the public systems have no strategic advantages of their own, today's "competition" will beget tomorrow's monopoly. In short, immediate competition can differ dramatically from long-run competition without even any necessary relationship between the two. Thus, where the existence of public preference in hydroelectric site relicensing would support greater public competition with investor-owned utilities, its elimination (in the name of "leveling the playing field" and reforming the process by which sites, themselves, are distributed) would, instead, "level" the public competitors and destroy the competitive playing field.

The "level playing field" argument has its intuitive appeal, especially in today's political arena which seems to have sprouted more than the usual number of football analogies. But, in evaluating public preference in hydro relicensing, the level playing field analogy is misleading and wrong. When two matched teams take the field or two middleweights get into the ring, it may be anticompetitive to give a weapon to one. Two equally matched athletes will not have a fair race if only one is issued a bicycle. But that is not the case before us.

The Alabama Power Company has assets of more than $6 billion; the municipal system in Foley, Alabama has assets of $20 million. Niagara Mohawk also has assets of $6 billion; the municipal system in Massena, New York has assets of $10 million. Pacific Power & Light has assets of nearly $5 billion; the Public Utility Districts of Clark and Cowlitz counties in Washington have combined assets of less than 5 percent of that total. Central and Southwest Utilities has assets of $6 billion and controls the only power pool and transmission system in south Texas; the municipal system in Brownsville, which has assets of about $100 million, is surrounded by CSW for more than 200 miles and CSW won't admit Brownsville to the Pool or even sell transmission service to other power sources unless Brownsville pays a price that is more than 200 percent of CSW's transmission costs. Southern California Edison has assets of $12 billion and, together with Pacific Gas & Electric which has assets of $15 billion, controls access to Pacific transmission intertie that runs from Los Angeles to the Pacific Northwest; the assets of the municipal systems in Riverside and Anaheim are less than one percent of either Edison's or PG&E's and the investor-owned giants won't allow the municipalities access to the transmission intertie. And so it goes, whenever one compares most public systems with their vertically integrated investor-owned rivals throughout the country.

Would the competition really have been more effective, and more fair, and produced greater efficiency, if David had not the preference of a slingshot? If we give the Goliaths of this industry their "level playing field" by eliminating public preference they will, of course, win all the "competitions" no matter how inefficient and incompetent they may become; because, then the Davids won't even show up to compete, having encountered that most pervasive of all barriers to future competitive entry: the remembrance of past disaster.

The essence of public preference in hydroelectric relicensing is just that, a preference. And, public preference does not mean a "level playing field" for the dispensation of federally licensed hydro sites on which every applicant is treated equally. The hydro relicensing "playing field" is tilted in the direction of public preference; and with good cause. This licensing "playing field" is not the field that should be leveled if our objective is to serve the public interest by improving market competition.

The relevant playing field in which competition is important is the marketplace where electric power is sold to consumers. Licensing, itself, is not the competitive playing field, but a means to improve competition through the exercise of discretionary public policy. There are very few discretionary tools at our disposal to improve competition in the ultimate marketplace. It would, therefore, be a horrible shame and a great loss to misunderstand the role of public preference and to mistakenly treat hydro relicensing as the end in itself, rather than as a means to the real end of improved competitive muscle in the electric power industry.

Public preference in hydroelectric relicensing is essential in order to improve competition in electric power markets. Arguments that focus on the degree of competition or "competitive fairness" in the licensing process miss the point. That is like arguing that David and Goliath should have first arm wrestled, with the slingshot going to the winner.

Without public preference, the pressure is off; the Goliaths can go on building their Comanche Peaks, Seabrooks, Midlands, Shorehams, Diablo Canyons, and the like without fearing that these commercial failures will be their undoing. Consumers' options will be more limited. The competitive possibility of citizens turning to a public system with the help of public preference will no longer be a worrisome threat. All that need be done is to overcome a few regulators, and that is far easier than overcoming effective competitors.

Regulators, even the best ones, face tremendous adverse pressures, especially when it comes to disallowing the recovery of excessive investment costs. Politics aside, the legal view in most states is that a regulatory cost pass-through is required unless there is a sustainable finding of "imprudence". Consider how much more lenient that is than the law of competitive markets, where firms can lose vast sums of money just by making honest mistakes or by having the bad luck of a more efficient rival, or an overvalued dollar in the world economy, or an economic recession. Consider the economic absurdity of the billions and billions of dollars of unproductive investments that so many investor-owned utilities have made in recent years, and yet not a single business failure; not a single economic reorganization; not a single corporate head has rolled.

Regulation of large investor-owned utilities doesn't come anywhere near competition as a disciplinary force. Regulation isn't even close to public enterprise in this regard. Consider what happens to public officials who are responsible for major economic losses. Imagine how fast the Postmaster General would be run out of town if he built a multi-billion dollar plant and it wouldn't run.

This, of course, is not to say that public managers are inherently less prone to make mistakes or even less likely to come up with losers than are private managers operating under similar circumstances. It's just that without the discipline of competitive market rivals the private managers of our huge investor-owned utilities do not have the same external pressures for good performance. The public manager who does a poor job knows that he is accountable to either the voters or the politicians and, more important than mere accountability, he knows they will dump him if he is a failure just as unceremoniously as competitive markets dump their losers.

But the top executive of a huge investor-owned utility doesn't get dumped by anybody. Certainly not by the stockholders; they are so small and so dispersed and, besides, management has all the proxies. Can you think of a single significant dissident stockholder threat that has occurred in this industry? Regardless of how poorly management performs, that just doesn't happen in these companies. On the other hand, I am sure we all know of public officials who were dismissed by their "owners" for unsatisfactory performance just as we know of similar casualties in competitive markets.

Regulatory discipline in this regard is of little consequence. Regulators don't tell utility executives how to run their businesses; and when they run them poorly the regulators are often there to help bail them out at the ratepayers' expense. Ex-regulators sometimes even become their spokesmen, their lobbyists, and their special pleaders in regulatory forums, seeking higher profit rates, more lenient cost pass-through rules and the elimination of competition from the new regulators.

No; regulation is not the answer. You don't have to be an economist to appreciate that. The verbalization is enough: To compete is active; it is positive. To regulate is passive; it is negative. Indeed, the proper expression is to be regulated. To compete is to do something. To be regulated is to be inhibited from doing something.

Some public systems have been able to function without the benefits of hydro facilities that are now operated by privately-owned utilities that are coming up for relicensing. Why is public preference important in those cases?

The ability of public systems to exist is only a limited part of the issue. David could probably have existed without the sling-shot; but he could not have challenged Goliath. The ability of public systems to present a serious competitive threat is the real issue at stake in today's public preference debate. Without preference, that ability will be greatly diminished; with it, competitive pressure will be a real concern to the otherwise dominant private systems.

This competitive threat, moreover, is actually of greater critical importance today and in the immediate future than it was twenty or thirty years ago. No one would deny that 50 years ago public preference played an important competitive role in the evolution and revitalization of our electric power industry which had become poorly managed and costly prior to its collapse and reorganization in the 1930's. Since then, technological changes in the industry and the increasingly anticompetitive behavior of the dominant private firms have gradually limited competitive pressures. Scale economies in generation and transmission together with the private utilities' attempted exclusion of public systems from power pools and transmission grids have gradually strengthened the dominant monopolists and reduced the competitive threat. Paralleling this trend, consumer dissatisfaction with the rising costs and inefficiency of the privately-owned monopolies has again risen to levels equalling or exceeding the discontent of 50 years ago. In short, competition needs a new boost. The private utilities need the pressure of real competitive market threats as an incentive to improve their dismal performance record of the past decade. Public preference in hydro relicensing is an important way in which this needed competitive stimulus can be achieved.

Why is preference necessary in order for public systems to challenge the private utilities for license renewals?

There are two reasons. First, without public preference there will be a natural tendency for incumbency preference and the inertia which that will engender. Second, public systems generally face more severe constraints on their ability to mount an effective licensing challenge than do the private systems because of differences in their accountability to consumers. A public system that wants to make a license challenge must typically first obtain authorization for the substantial expenditures that such a challenge entails. This involves going before a publicly elected or appointed body that represents the utility's customers and justifying the effort in terms of the likelihood of success. With public preference and at least a 50/50 chance of success, authorizations and funding may be attainable. Without public preference and the perceived long-shot that would exist under incumbency preference, consumer approval will be rare and serious active challenges will be few.

This is in contrast to conditions facing privately-owned power companies whose directors are not nearly as responsive to, or controlled by, consumer interests. A private power company with a limited chance of success is still likely to pursue a relicensing challenge as long as the expenditures are recoverable from ratepayers. Since there are no instances where any similar type of cost recovery has been denied by regulatory authorities, regulatory cost disallowance is not a significant constraint. Whereas a publicly-owned utility must justify a relicensing challenge to its customers on the basis of the net benefits that such a challenge is likely to provide to them, an investor-owned utility's management will view such a challenge as worthwhile even when there are net costs to consumers if, as a consequence, a competitive public system is thereby denied benefits that would make it a more viable rival.

In summary, without public preference, public systems will be unlikely to attempt most competitive relicensing challenges. This is so because a relatively high probability of success is almost always required in order to obtain public funding authorizations. Without public preference, the private utlities' incumbency advantages will be seen as overwhelming. At the same time, corresponding private utility challenges are not so constrained because management is not similarly accountable to consumers and net customer advantage is not a limiting factor where management perceives that a strategic competitive advantage can be gained by blocking or raising the cost of a public rival's access to the resource.

What is "Just Compensation" for property that changes hands when an existing hydro site is relicensed to a new applicant?

The appropriate level of compensation is net book value. There are two reasons for this. First, book value is the maximum amount that a utility's owners would derive from the property if they were to retain it as part of their utility rate base. Therefore, any payment in excess of net book value accruing to the benefit of the utility's owners would be an unwarranted windfall--in effect, precisely the type of excessive profit that regulation is designed to prevent.

Second, even if payments in excess of net book value were flowed through to the utility's ratepayers, they would be unwarranted. That is so, because these payments would represent a "taxing away" of the future benefits of the hydro site which should accrue to the new licensee's customers.

The customers of the original licensee derived the full benefits of the initial license during its term. Any payment in excess of net book value at the time of a transfer would therefore be a "tax" or transfer of future benefits from the new licensee's customers to those of the old licensee. At the extreme, payments based on a replacement cost would constitute the full taxation and capture of the present value of all future net benefits by the original licensee. Thus, as a practical matter, while the original license may have had a fixed term, the economic benefits of the site would accrue to the original licensee in perpetuity. Compensation based on replacement cost or a corresponding measure of current value (as opposed to net book value) would, therefore, effectively replace public preference with an absolute incumbent preference under which all site benefits (past, present and future) would be attributed to the original licensee whether his license is renewed or not.

Why is public preference a valuable public policy for consumers who are not served by publicly owned electric utilities?

Customers of both public and private electric utilities will benefit from public preference in hydro relicensing because it is a key catalyst for strenghthening competitive forces in the electric power industry. With public preference in hydro relicensing, the customers of privately-owned power companies will be able to establish or shift to public systems as a last resort if their privately owned utilities fail to perform adequately. Conversely, without public preference, the customers of privately owned power companies are far more likely to remain the captives of their present electric power monopolies regardless of how poorly they perform and how costly that performance may become. Investor-owned utilities recognize that with this last resort alternative removed, competitive threats as a result of operating inefficiencies or excessive costs will be difficult, if not impossible, to mount, and captive consumers will have no options but to pay their tariffed rates. For the reasons discussed above, regulation is not a sufficient solution to this problem.

While there may, therefore, be limited immediate attractions in opposing public preference if one is served by a privately owned utility, any benefits would be very short-lived. The consequence of strengthening the dominant monopolist's hand in the long-run would be especially costly to those electric power consumers who are served by, and would become permanently captive to, privately owned systems. Only by strengthening competition and keeping it alive and healthy will the private power companies be faced with market forces compelling them to operate more efficiently so as to keep their own costs and rates as low as possible.

If, then, there is no adequate substitute for competition and if preference is a necessary prerequisite to the attainment of effective competition in electric power markets, how does competition actually work within the regulated market framework of this industry, and what does it accomplish? Let me turn attention to those questions.

Structure of The Industry

Three major vertical stages of production are generally recognized in the electric power industry. They are power production, which is the generation of electricity; the assembly and transmission of wholesale power from the points of generation to major load centers; and the distribution of this electricity to individual homes and businesses.

Most of the electricity in the United States is produced and distributed by large, vertically integrated companies that perform all three functions of generation, assembly and transmission, and distribution. These companies are called vertically integrated because they combine the separate stages of generation, assembly and transmission, and distribution of electricity in a single firm.

The industry also includes smaller firms, many of which are municipal systems and cooperatives, whose principal business is the distribution of electricity. Many of these smaller systems do not own any transmission facilities, because they do not have large amounts of power to move over long distances. Some smaller systems own part or all of their own generation, often as a result of public preference in hydroelectric licensing; and thus they are, to that extent, vertically integrated. Others do not own any generation at all.

For most purposes, the generation, assembly and supply of wholesale power is a separate market from the distribution of electric power at retail. Wholesale and retail electricity are separate markets because the services are technologically and physically distinct (e.g., as in the case of oil production, transport, refining, and retailing), and because there are economically important enterprises that participate only in one or another of them.

Another reason for viewing these as being separate markets is the occurrence of economically important transactions between wholesale power suppliers and retail distributors. Distribution systems purchase wholesale power supplies, which involve both generation and coordination and transmission, from vertically integrated companies and from those enterprises (principally cooperatives and government agencies) that specialize in the generation aspect of the industry. The "wheeling" of power by a third party is the sale of pure transmission services to facilitate a wholesale power transaction between two parties.

All of these circumstances indicate that wholesale power supply and retail power distribution are properly viewed as occurring in separate markets. Thought of in these terms, the structure of the electric utility industry conforms to a traditional vertically integrated market environment involving primary material production (i.e., generation), assembly or intermediate processing (i.e., transmission) and product marketing (i.e., distribution). This corresponds generally with market structure in other vertically integrated industries, such as oil (crude production, transport, refining and product marketing), natural gas (well head production, gathering, processing, transport and distribution), metals (mining, primary production and secondary fabricating), and other vertically integrated industries where the potential for anticompetitive problems has been significant (e.g., film, cameras and processing; local telephone networks, long distance and terminal equipment; office machinery, peripherals and supplies; news publishing and distribution; etc.)

Competition in the Industry

It is largely because workably competitive markets are not always possible, that we find it necessary and desirable to regulate certain industries. Foremost among these are our electric utilities. While regulation contributes substantially to the performance of these industries, there is virtually a unanimity of opinion that it is, at best, an imperfect substitute for competition, and it is widely accepted that greater reliance should be placed on competitive forces whenever that is possible.

While efficient utility regulation can be an effective deterrent to many traditional monopolistic abuses, it does not provide sufficient positive incentives for maximum advancement in the fields of management efficiency, cost control, research and development, and price reductions. These are areas where the threat of competition can be especially stimulating.

There are numerous instances and situations within the regulated sector of our economy where competitive stimulus provides a valuable and irreplaceable supplement to discretionary public control. Indeed, in some instances it has been argued that less regulation and greater reliance upon competitive market forces would lead to an improved result.

In most cases involving utilities, however, it is not really a question of choosing between regulation and competition. Instead, there is a growing understanding of the ways in which competitive forces can be made to serve as integral and complementary forces within the regulatory framework. While regulation can be an effective negative restraint against monopolistic excesses, regulatory commissions (unlike market competition) are extremely limited in their ability to force firms to accept risk in the interest of advancement and innovation. Without the threat of viable competition, utility management is free to choose the "quiet life" as opposed to a more dynamic quest for product and market improvements. Given the knowledge that their markets are secure and that future growth is not likely to be inhibited by competitive forces, there is little to compel even regulated monopolists to develop and introduce new concepts and service improvements at the maximum efficient rate.

Any suggestion that competitive goals should be subordinated to the goals of regulation or that deregulation should follow where regulated industries have not obtained optimal performance misses the point. The fact is that the goals of regulation and competition are not mutually exclusive. In many respects they are identical. Where the two forces can complement each other, the mutual objective can be better attained.

Congress intended to allow room for significant competition and management initiative in enacting the Federal Power Act. That Act leaves the initiative of electric rates with private utilities subject to eventual alteration by the Commission. The courts have, on several occasions, held that the Act does not insulate utilities from the antitrust laws and that the Commission should look to the policies of those laws in performing its regulatory duties. Thus, Congress created a regulatory system with an eye to preserving and enhancing competition, not replacing it.

There are a number of reasons why competition in the distribution of electricity serves the public interest. First, the directly affected consumers receive lower rates.

Thus, competition contributes toward one prime purpose of the Federal Power Act -- to protect consumers. Second, competition can also help regulatory agencies fix rates at the lowest possible levels, consistent with service quality and efficiency, because the rates and costs of rival systems can be used as a benchmark against which the performance of utilities can be judged. Finally, increased competition provides an increased incentive for all the affected utilities to maintain their efficiency in order to compete effectively.

Where alternative power generation possibilities exist and transmission is available, bulk power supply competition appears as sellers with available capacity or energy seek to match up with utilities requiring capacity or energy to meet their retail loads.

Competition at the distribution end of the electric utility industry is also far more prevalent than is often recognized, and it serves as a valuable supplement to regulation. Indeed, utilities themselves pay close attention to the retail rates of neighboring utilities.

Competition for the franchise to serve a territory represents one important form of competition. It may involve the process of territorial annexation followed by condemnation of the privately-owned utility distribution system and purchase thereof by the municipality; the sale of a municipal system to an investor-owned-company; or the failure to renew a franchise or the condemnation of a distribution system. Public preference in hydroelectric relicensing is an important calalyst for this process since it provides public systems with an alternative source of economic power, while, at the same time, making the competitive threat a realistic concern to the investor-owned power company.

Although most retail electric customers have no individual choice of electric supplier, public preference enhances that opportunity collectively through their local governments. Because that possibility existed, the Court in the Otter Tail case defined a relevant geographic market embracing all of the municipalities which the investor-owned utility could or did serve, even though no door-to-door competition existed or was likely to develop.

In the Otter Tail case, the Court found that:

> "the aggregate of towns in Otter Tail's service area is the geographical markets in which Otter Tail competes for the right to serve the towns at retail. That competition is generally for the right to serve the entire retail market within the composite limits of the town and that competition is generally between Otter Tail and a prospective existing municipal system. (410 U.S. at 369-70)".

What the Court held entitled to protection from Otter Tail's anticompetitive practices was the potential competition that exists by virtue of each local government's right to replace its existing retail power supplier.

Municipalities in most states are empowered to establish their own municipal electric systems (with elector approval). Alternatively, a city with a municipal electric system could, at any time, decide to discontinue its operation and sell out to a private utility. Thus, while the competitive choices of most municipalities parallel those in Otter Tail, the effectiveness of this competitive alternative and the impact that it will have on overall industry efficiency depends on the availability of alternative economic power supplies to municipalities that wish to pursue the alternative. The elimination of public preference would undermine the viability of this competition and help to preserve impervious and entrenched monopolies for investor-owned power companies.

Competition for Industrial Location

Especially where electricity purchases constitute a significant portion of a firm's total costs, that company is likely to consider power rates in making location and expansion decisions. The tendency for major power users to base locational decisions to some extent upon rates has been observable in the U.S. over a considerable period of time.

The economic realities of competitive industry mean that industrial power users are necessarily highly sensitive to increases in operating costs. They must be since they compete in markets with other firms which are located in other utility service areas. In some instances, competition is concentrated in mutually accessible local markets. Thus, if industrial power rates are disproportionately high in the service area of a nearby municipal system, some industries located in the municipally-served area may be forced (as a direct result of market competition) to cut back electricity consumption and industrial operations. Others will elect to expand their operations in other regions, and potential newcomers will be encouraged to locate elsewhere. The negative impacts stemming from these consequences are obvious. First, local employment will suffer. Second, the loss of high load factor industrial demands will increase average costs for remaining power consumers. Third, long-term growth prospects will suffer due to the locational disincentive of relatively high local production costs in comparison with alternative conditions in neighboring communities that are served at a lower cost.

If the electric utility rate increases imposed on a particular firm outpace the rate increases imposed on comparable competitive firms in other service areas, there are bound to be anticompetitive consequences. This, in turn, will influence industrial location decisions. In general, the lower are utility rates in a particular geographic region and the less the rate of price increase relative to other regions, the greater the rate of industrial development. The extent to which competitive power rates influence locational decisions varies from one specific set of circumstances to another. It will tend to be most important where accompanying considerations as between two alternative locations are otherwise similar. Obviously, without adequate markets, supplies of labor, resources, and other factors of production, no amount of power, at any price, will be sufficient for industrialization. However, in general, the price of electricity is one significant factor which influences industrial growth.

In those instances where investor-owned utilities (which incidentally, compete very aggressively with public systems for industrial loads) have acknowledged the importance of this competition, they have appealed for the elimination of public preference and the other factors which have enabled public systems to become effective rivals; then there would be less threat of losing competitive battles. Any short-term attraction that these appeals may have to those customers that are served by investor-owned systems, would soon wear off as the effects of reduced competition gradually destroyed incentives for efficiency and advancement in the industry generally, thus resulting in higher long-term costs and less adequate service for customers on all systems.

Yardstick Competition

Yardstick competition involves comparisons between one utility and another to identify those that are performing efficiently and well, and also to identify ways in which utilities can improve their performance. Yardstick competition is an important adjunct to the regulatory process, and an aid in helping regulators to assure that the best possible and most efficient service is rendered by utilities subject to their jurisdiction.

The customers of any utility pay attention to the relationship between the rates they pay and the rates offered in surrounding territories. When utilities are publicly-owned, citizens are also the ultimate regulators of the utility system because they elect the government that controls the operation of the municipal system. It is the voters who determine whether the municipal system is to continue to survive or is instead to be sold out, most likely to a competitive investor-owned rival.

To the extent that public systems are able to attain adequate economy and efficiency in the area of power supply, there is the potential for competition between them and nearby investor-owned companies. However, the ability to compete effectively in ultimate markets depends on the ability to acquire adequate power production and also on the ability to transmit and deliver that power economically. Because of their critical dominance over essential transmission and coordination services, investor-owned utilities have often been able to erect barriers to effective competition from public systems in wholesale power supply markets. Public preference in hydroelectric relicensing will help to tear down these barriers in the future, especially where hydro sites are located within the general geographic proximity of existing or potential public systems. Nor are the benefits of such preference provisions restricted to communities that are adjacent to hydro sites. A large investor-owned utility which serves all or most of an entire state may face this type of competitive threat only in a few areas. Yet, because of the need to compete effectively in those areas, pressures for greater efficiency and cost control will exist at the corporate level and that, in turn, will benefit consumers throughout the investor-owned utility's entire service area.

Self-Sufficiency Arguments

Some have argued that preference should not be necessary to stimulate competition and that worthy public systems should be able to survive on their own, simply by doing what the large investor-owned systems dc, only better. But, there are a number of important reasons why it is often not feasible for small public utilities to develop their own transmission grids and pooling arrangements so as to compete with integrated investor-owned systems. First, there are large economies of scale in the transmission of electric power. The National Power Survey states:

> "The cost per unit of energy transfer decreases with escalation of voltage levels, even though total capacity costs increase, because the capacity of transmission lines in stability-limited systems increases approximately as the square of voltage, while total cost increases at a lower rate. In addition, the line losses increase with higher voltages." (Vol. I., Chapter 12, p.7)

Thus, while public systems can compete with investor-owned systems at the distribution level, many do not have the economic ability to build their own high voltage transmission lines. The costs of long distance, high voltage transmission lines precludes a small system from building duplicate facilities.

Another obstacle to competition in wholesale power supply is economies of large scale in the efficient assembly and transmission of wholesale power. Economies of scale occur when an increase in the volume of production is accompanied by lower unit costs. It is difficult to find examples of industries in which economies of scale do not exist to some degree. Eventually, however, a point is reached where increases in the volume of output do not result in lower unit costs. One reason for economies of scale is that large thermal generating units, with capacities in the hundreds of megawatts, have lower costs per megawatt than many smaller thermal units. But these large and efficient thermal units are often too big for smaller distribution systems to own, integrate and operate independently. On the other hand, there are many smaller efficient hydro generating sites where preferential public relicensing can help to offset this disadvantage. In fact, there are many ways that even the largest, vertically integrated electric utility companies coordinate their generation and power supply activities to increase their efficiency, and more often than not, they block or attempt to block small public systems from participating in these undertakings:

- Large systems often pool their reserves. With reserve sharing, it may not be necessary for any one system to maintain a spinning reserve equal to the largest load on one of its generating units, because in the event of an emergency outage, it can draw upon the spinning reserves of the other participants in the sharing arrangement.

- Large utilities sell generating capacity and/or energy to each other during outages for scheduled maintenance. They also engage in jointly scheduled maintenance activities, so as to arrange for a sufficient surplus of generating capacity at times when large generating units are out of service for scheduled maintenance.

- Investor-owned utilities engage in economy exchange of energy with one another. Where there is load diversity, such that various systems experience their peak demands at different times of the day or at different seasons of the year, these economy interchanges permit greater and more efficient utilization of baseload generating facilities. In other circumstances, economy exchanges permit each participant to take minimum advantage of the diversity in the energy costs of their several generating units, so that the least expensive units on all of the participants' systems are always fully loaded before a more expensive unit on any one of the systems is used to carry part of the load.

- Large utilities engage in joint ventures in generating plants, or in unit purchase arrangements. These arrangements permit several utilities to join together to construct a single generating unit of large scale and greater efficiency than any one of them could effectively use by itself. These arrangements permit a single system to add generating capacity in increments that match the growth of its load, while at the same time taking full advantage of economies of scale that are available only through the construction of very large units.

- Many large systems have joined their transmission networks in an interconnected grid spanning large

> geographic areas. These interconnections permit bulk power transactions even between non-adjacent utilities. Thus, they broaden the area through which coordination of wholesale power suppliers can be achieved. Where the transmission of wholesale power between two utilities must be accomplished using the transmission grid of a third, there may be a charge for this service, but the existence of such wholesale power transactions indicates that the economic advantages of the wider of the areas are in some instances enough to overcome the costs of transmission.

Natural Monopoly

One of the most unfortunate concepts ever contrived by an economist is expressed by the phrase "natural monopoly." Caesar's subjects may have had an intuitive grasp of the idea of marginal cost pricing; but they could not have grasped the idea of a "natural monopoly." As for the idea of monopoly in general, they understood that the answer was more in the nature of Caesar than in the nature of the world.

So-called "natural monopolies" have originated as a result of public policies founded on the belief that some public purpose would be advanced by permitting a monopoly and discouraging competition. That, of course, may be appropriate in the context of some public policy objectives (e.g., national defense). In fact, the reasons for such monopolies are also the reasons for public ownership and operation. The difference is that under public ownership and operation there is direct accountability to, and recourse by, the grantor of the monopoly. The point here, however, is not to debate the relative merits of private monopoly versus public enterprise, but to observe that monopolies are not products of nature. Indeed, how natural can a monopoly be if competitors want to enter and restrictions must be enforced to keep them out?

Under the rubric of "natural monopoly" it has been argued that because of the peculiar characteristics of the electric utility industry, traditional competitive concerns are not relevant and that the dominant position which an investor-owned utility may hold within the electric utility industry is attributable to legal and economic facts of life in this industry. But, that is not a valid argument.

Whatever legal and economic barriers do or have existed do not cast the present market structure in concrete. State and Federal laws allow municipalities to provide electric service at retail within their boundaries in lieu of investor-owned companies. Once it has acquired the necessary distribution system, a municipality may have wholesale power supplied by whatever sources it is able to access and integrate economically. Theoretically, a municipality may purchase bulk power from other wholesale suppliers, or it may generate itself. Likewise, legal and economic barriers did not prevent today's investor-owned systems from reaching their present market position through the acquisition of independent systems. In short, there is nothing written into law that guarantees the current market position of any utility. Rather, each utility's market share is subject to the ebb and flow of competitive market forces. Those forces may be periodic and limited in strength, but nevertheless they exist and deserve to be protected.

The economic barriers to the entry of new competitors in the electric utility industry are generally high. Long standing territorial agreements, conditions imposed on the availability of wholesale power, and the availability of bulk power wheeling have been major practical barriers. In addition, to start up its own retail electric system, a municipality would have to make a considerable capital investment in a distribution network, either by constructing its own system or acquiring the existing distribution system. A similarly large capital investment would be required for any existing retail system to integrate vertically so as to become an efficient wholesale power supplier as well as a distributor.

Simply because of the expense involved, no municipality would undertake either of these steps lightly. Before doing so, it would have to satisfy itself that, at least eventually, it would be able to provide electric service to its citizens at rates that meet or beat those being offered by the private utility it would displace. But the existence of these high economic barriers to market entry hardly negate the idea that large vertically integrated investor-owned systems should be precluded from exercising monopoly power. Indeed, the opposite is true. The presence of high entry barriers reinforces, if not confirms, the existence of monopoly power suggested by a utility's dominant market posture within its geographic service area.

If barriers to entry are low and unimportant, then the existence of numerous potential entrants on the edge of the market could limit an existing firm's control of price or exclusion of competition and thus its monopoly power. But if there are high and significant barriers to entry into a market, that fact strengthens the monopoly power presumption that may be implied by market share. Public preference in hydro relicensing will serve to reduce entry barriers, thereby contributing to improved competitive market performance even if actual entry occurs only seldomly.

Conclusion

Some legislators may see a short-term attraction in stripping public preference out of hydroelectric relicensing, if there are now no public systems in their district and if the elimination of preference may permit the local investor-owned utility to keep or acquire the benefits of a hydro site that might otherwise go elsewhere. But that is casting the world as a zero sum game, when, in fact, it and our economy are dynamic and the benefits of maintaining a competitive state over time are much greater than any short-term gain from structuring the process to strengthen a dominant monopolist. Just as the short-term benefits (i.e., tax savings) of eliminating fire and police protection from the budget would be dwarfed by the long-term costs, so too, impairing potential competition in the electric power industry to gain a small short-term reduction in the existing monopolist's cost would obviously be a bad political bargain.

It is also obvious that public preference is critical for the vitality of public competitors in the electric power industry. Likewise, it is obvious that viable competitors are a prerequisite to the major benefits of competition. Finally, it is obvious that the benefits of competition are the dynamic market efficiencies and advancements that competition encourages over time, and not merely the lower prices that may exist in a competitive market at any moment in time.

Oliver Wendell Holmes once said that we need education in the obvious more than investigation of the abstruse. But, in this case, may I suggest that education in the obvious is not enough. What we need most of all is the courage to act on it.

Senator **Murkowski**. Thank you very much.

I am wondering—and I will just ask this as a panel question. Do you believe that the criteria under section 14 for compensation should apply when a public power company takes over a private facility on relicensing, which is your point? Then why did the public power companies in 1953 or thereabouts require an exemption from this section for takeovers of public facilities by the Federal Government? There seems to be an inconsistency there.

Mr. **Radin**. My recollection of that hearing and consideration of that issue was that the public systems, the local public power systems, at that time felt that these were basically public resources we were dealing with and that there was no advantage in having the Federal Government take them over as far as the general public was concerned. They were already in public hands. Consequently, there was no need to transfer the ownership from one public agency to another, and that was the primary motivation, I think.

And the bill also dealt with, as I recall, the reporting requirements, and some of these which were not applicable to public agencies. These were the primary motivations, as I recall, in the 1953 amendments.

Senator **Murkowski**. Well, it effectively, though, blocked the ability of the Federal Government to take over.

Mr. **Radin**. No; the Federal Government still retains the right to take over by condemnation.

Senator **Murkowski**. By condemnation with compensation.

Mr. **Radin**. That's correct.

Senator **Murkowski**. And the just compensation was in what form?

Mr. **Radin**. What form is it? That is a question that I think has never been litigated, and I don't think it is at all clear as to what just compensation would mean if it were applied to the publicly owned utilities in a condemnation.

Senator **Murkowski**. What if the public utilities were taken over by the Government?

Mr. **Radin**. What's that?

Senator **Murkowski**. Your contention is that none of the public utilities were taken over by the Government?

Mr. **Radin**. The publicly owned utilities?

Senator **Murkowski**. That's correct.

Mr. **Radin**. They had not been at that time and have not been subsequently.

Senator **Murkowski**. So we've never had a case of what just compensation is in that particular sense.

Mr. **Radin**. That's correct, the issue has never been litigated. And there are some disputes among attorneys now as to precisely what is meant by those provisions.

Senator **Murkowski**. Senator Johnston brought out the point rather extensively on just what his attitude was toward just compensation. I assume you heard his comments?

Mr. **Radin**. Yes, I did.

Senator **Murkowski**. Do you care to expand or make any comments with regard to his particular position?

Mr. Radin. If I understood what he was saying, what he was driving at, he was making a point that it is not at all clear as to what just compensation means. And I think the testimony of the investor-owned utilities this morning also left a great deal of doubt as to what was meant by just compensation.

Did they mean replacement value? Did they mean reproduction cost new? Did they mean taking advantage of the falling water that was no longer available to them if the license was not renewed? It was very unclear as to what is meant by just compensation.

And as I understood Senator Johnston, he was raising some very serious questions about whether or not that was an appropriate standard.

Dr. Wilson. If I might comment on that, I understood Senator Johnston to be saying that the real economic value of the hydro site was in effect the water itself, rather than the damming of the facilities, and I think that's absolutely true.

That really underlies the point I tried to make in my statement. That is, that compensation in excess of the book value of the dam and its facilities is really a taxing away of the future values of the water at that site on the part of an applicant which is not granted the license. So I think that's what we are dealing with here, is the value of the water, and that compensation of net book value would be taking the future benefits and giving them in effect to the party who is giving up the license.

Senator Evans. Mr. Chairman, while what you say may be true, I don't think that was Senator Johnston's point. I think he was trying to elicit from the witnesses' table whether they really thought they had sufficient language in the bill to accomplish what they were going to accomplish. I believe that was the point.

Senator Murkowski. It would seem that when you try and develop a form of compensation that is going to be supported by both points of view, you may be trying to put together something that reality dictates otherwise. We can sit here and review points of view, both of which have substance, both of which are relative to the public interest, whether it be right for the ratepayer to pay for a project twice, whether it's in the private sector or the public sector, or the right of the private sector to receive compensation for lost future revenues, and on and on.

Obviously, that is the purpose of this hearing, but I don't know that, with the witnesses that have spoken so far, we have come any closer to resolving the disparity that exists on the issue of compensation. That's a profound observation and I'm sure it's one——

Mr. Radin. Senator Murkowski, if I could interject here. I don't want to attempt to speak for Senator Johnston, but I will note that when he introduced his bill on February 6, 1985, his statement in the record says he does "have serious doubts about whether that provision is sound policy."

That was in reference to the provision of just compensation in the S. 346—426, I'm sorry.

Senator Murkowski. Senator Evans.

Senator Evans. Mr. Radin or anyone on the panel, but I'll start with you, Alex. Essentially the same question, perhaps worded a little differently than what I asked this morning. In your view, does the license granted for a 50-year period, whether to a public or a private agency, grant anything? Should there be any expectation—expectation—that they have acquired anything other than the right to utilize that water resource for 50 years?

Mr. RADIN. No, I think there is no expectation that they would get that right beyond 50 years. Otherwise, they would be given a license in perpetuity. The entire purpose of Congress in enacting the Federal Water Power Act of 1920 was to limit the license for a set period of time so that it would not be given in perpetuity, and also because the license could be reexamined at the end of that license period to see whether or not any changes should be made in the method of operation or other conditions surrounding the license.

Senator EVANS. Would you say that that means that water and the ability to create power from that low-cost water is a public resource, that a certain group of ratepayers have had the benefit of that for a 50-year period, and if it is in essence granted for perpetuity by the framework of the law that other citizens, other ratepayers, will never have an opportunity for the benefits of that low-cost resource?

Mr. RADIN. That would be the net result if the license were granted in perpetuity.

Senator EVANS. If there is significant preference for public agencies over private agencies on relicensing, as well as there is now on initial licensing, wouldn't that lock in the ratepayers of publicly owned agencies to have the benefit, to the exclusion of their neighbors or others?

Mr. RADIN. Not necessarily. I think it's certainly conceivable that there will be challenges to public agency licenses, as well as private utility licenses.

Senator EVANS. But you would agree that there are significant advantages now granted in the other agencies?

Mr. RADIN. In the initial licenses, yes.

Senator EVANS. But there are none in relicensing?

Mr. RADIN. And in relicensing also, the way the law has been interpreted thus far by the Commission in 1980 and the fact that that interpretation has been upheld by the courts thus far, although it's being reconsidered by the courts at the present time.

Senator EVANS. Is there anything inherently—as far as ratepayers and the citizens out there are concerned, I would guess that most, when it really comes down to it, don't care very much about whether it's a public or a privately owned agency that's supplying electricity, so long as the rates are reasonable and the light goes on when you turn on the switch.

Wouldn't you say that's an accurate statement? They don't think very much about who is providing it?

Mr. RADIN. That may not——

Senator EVANS. I'd like to think so, but I would suspect that most people really don't.

Mr. RADIN. We conducted a poll recently that showed that people do favor competition within the industry, and also that they feel that public systems do provide benefits that are not provided by the private companies. So apparently, according to this poll, they do have some feeling as to whether or not they have a preference for public or private systems, though the predominant feeling is that they would like to have a mix of service by public and privately owned utilities.

Senator EVANS. Having had substantial experience with polls over a political lifetime, I'm always worried about polls sponsored by a group that has an interest in the results, and I would suggest that the private power companies probably have their own polls that show that people have a substantial support for private utilities.

Mr. RADIN. I think some of their polls tracked some of our findings. And we were rather concerned about our own poll and glad that it turned out the way it did, but we certainly did not try to jigger it in any way.

Senator EVANS. On page 19 of your testimony, you say:

> S. 426 is clearly drafted to prevent competition. Under this bill, if the FERC found the plans of the existing licensee met the minimum standards of section 10(a), then the Commission would not even consider the substance of competing applications.

How do you—how would you then identify, or what do you think the wording in 10(a) that says "best adapted" means? How can it be best adapted unless they've looked at others in competition? What does the term "best" mean?

Mr. RADIN. I think the point I was trying to make there, Senator Evans, is the way the bill is worded at the present time there would never be consideration of another applicant if these standards could be met. I was not speaking so much to the adequacy or inadequacy of the standards, but regardless of those standards, if they were met then there would be no consideration of a competing application, and that was the principal point I was trying to make.

Senator EVANS. Except that you've got to read the bill in its totality, and especially read section 10(a) along with it, because the bill refers specifically to section 10(a) and it does say in the bill that unless the Commission determines that such licensee's project will not meet the licensing standards set forth in 10(a).

But section 10(a) says "in the judgment of the Commission will be best adapted to a comprehensive plan." It seems to me that gets you right back into the Commission's review of competitive applications.

Mr. RADIN. No.

Senator EVANS. How can you determine best unless you see what someone else offers?

Mr. RADIN. My point is there would be no other competing application under that bill, because without a preference and with the wording of the bill as it is there would be a clear presumption in favor of the existing licensee, and no public agency would even bother to apply for a license.

Senator EVANS. Why not, if they thought they had a better application?

Mr. RADIN. Because the Commission under that bill would not even get to another application until it first determined whether or not the existing licensee could meet the standards of 10(a) and also it met—and had operated the project previously in an acceptable manner.

Senator EVANS. With the standards of 10(a), I'm not sure if this is what they had in mind, but it seems to me that meeting the standards of 10(a), you have to meet the test of best adapted. And if another applicant came in seeking the license and had a better plan, then the existing licensee isn't best adapted.

Mr. RADIN. As I understood Commissioner Sousa this morning, he was saying that they would consider the plan not only in relationship to a competing applicant, but also in what the Commission determined might be the best use of the resource. And so you could consider that as a test as well as a test against a competing applicant.

But I get back to my central point, which is that you get the best utilization of the resource from competing applications, and under the Wallop bill the competing applications would be severely discouraged.

Senator EVANS. Well, let's pursue another line. I'm not at all sure that that would necessarily be the case, but you have indicated that you don't seek legislation at this time?

Mr. RADIN. That's correct.

Senator EVANS. That you want to keep the status quo. What happens if the appeal court upholds the Commission's decision on *Merwin* and that's appealed to the Supreme Court and the Supreme Court upholds that decision? Won't you be right back here asking for legislation?

Mr. RADIN. We'll just have to look at it at that time. We have not determined what course of action we would take in that event.

Senator EVANS. Well, would you guess that you might seek legislation at that point?

Mr. RADIN. I would hesitate to hazard a guess at this time.

Senator EVANS. Well then you're not very interested in legislation, it seems to me, or you're not very interested in the *Merwin* case, then.

Mr. RADIN. Oh, yes. Oh, yes, we're very interested in it. [Laughter.]

Senator EVANS. You're very interested in the *Merwin* case?

Mr. RADIN. We are confident that the court will uphold the previous decision of the Commission.

Senator EVANS. Well, I think that if I were a prudent man I would always have a fallback position as to what I was going to do if they didn't. You said that you were very interested in the *Merwin* case precedent, but you're not very interested at this time in even thinking about legislation if you lose it on appeal?

Mr. RADIN. I just said that the bodies within our association that determine policy have not taken up that issue at this time.

Senator EVANS. Then I can't get you to say anything to ask the next question, then. You're very clever. [Laughter.]

Because the next question was, if so, what legislation on the table are you inclined to support right now? [Laughter.]

Score one for you.

Senator MURKOWSKI. I'll wait for an answer to that. [Laughter.]

Senator EVANS. I asked this morning, you know, about the fact that this is a difficult, tough problem. Some questioned the possibility of the power marketing administration taking over the facilities and distributing the benefits so that they kind of equally flow to all ratepayers, since the resources, the water resources are essentially a public resource of everyone. What do you think of that idea?

Mr. RADIN. I would hate to give any definitive comment on that at this time. I know that some of the members of our association feel that is a good idea. We have not considered it as a policy option at the present time, so I really cannot speak for our association.

I can only tell you that at least one of the groups within our association has advocated that position. The Midwest Electric Consumers Association feels that when the licenses expire the projects should be taken over by a Federal agency and power made available under applicable law.

Senator EVANS. What happens—we've been talking about the preference between the public and private agency—what happens when some of the publicly owned licenses come up for renewal, especially in the Northwest? As you know, it won't be on our watch, but some time after the turn of the century some pretty big dams, pretty valuable properties, will come up for relicensing that are now owned by publicly owned utilities.

What about competition then, especially competition maybe between two publicly owned utilities?

Mr. RADIN. That's quite possible.

Senator EVANS. How do you suggest that should be handled?

Mr. RADIN. I suspect that the Commission in that event would give a nod to the existing licenseholder if there is a——

[Laughter.]

Mr. RADIN [continuing]. If there is a contest between two public entities.

Senator EVANS. Mr. McKinney, do you care to respond to that, because I think we are likely to get to that point where two publicly owned utilities—what if you have a publicly owned utility who now owns a hydro facility that produces much more power than the customers of that utility can possibly use, and sells most of that product to somebody else? Should someone who then seeks it, needing the power for their own customers, have preference? Or should the existing licenseholder have preference?

Mr. MCKINNEY. We've talked about that and you can think of all sorts of combinations. My own personal feeling is that I think there probably will be competition between public agencies down the road and——

Senator EVANS. When that comes, who should have preference?

Mr. MCKINNEY [continuing]. And—I think they should compete, I think in a similar fashion that we have in *Merwin*. And it probably would be very unlikely, as we expect it to be in private versus public, to have very many ties and so you're back down to the tie breaker. I guess you're back down to the tie breaker.

Senator EVANS. That's really the only time you're talking about how you settle a tie-breaker. Would you settle it in behalf of the existing licensee, or how would you settle it?

[Pause.]

Mr. MCKINNEY. I really don't know. [Laughter.]

Senator EVANS. Well, Mr. Radin does. He would settle it for the existing licensee. So, Mr. Radin, for consistency, then when it comes to a tie-breaker, why not do the same thing when it's between public and private agencies, give the nod to the existing licensee?

Mr. RADIN. For several reasons. First of all, there is a fundamental public policy issue here, in that these are public resources, and I think the philosophy that was adopted by the Congress in the early part of this century in seeing that there was a preference to public agencies was a desirable public policy from a number of standpoints—both from the standpoint of utilization of that resource and also from the standpoint of fostering competition within the industry.

And considering the relative size of the public and private systems and their resources, that made sense then and it continues to make sense now. Furthermore, if we look upon competition as a desirable objective, the experience to date has shown that it is only as a result of the preference in relicensing that you have any competition at all.

I think it is significant that all the competitive licenses that have been filed thus far are by public agencies. There may be one exception with an Indian tribe, but there have been no private companies that have competed against other private companies for licenses. So if we think that competition is desirable and it brings about a better end result, then the preference to public entities is good public policy.

Senator EVANS. Would you say that circumstances today are different than they were in 1920?

Mr. RADIN. In some ways they are; in other ways they are not. For example, in 1920 I think there were about 4,000 private power companies. Today there are about 200. So if you're looking at the question of competition within the electric industry itself, the situation has deteriorated somewhat since 1920.

Senator EVANS. On the overall, would you say that public power is stronger now than it was in 1920?

Mr. RADIN. Probably somewhat, although we have been keeping records, or actually they're Government records, only since about 1946. And since that time, the relative proportion of public and private power has remained virtually the same within the industry. There has not been a great deal of shifting.

It would be hard for me to say whether there's been a marked difference since 1920, but certainly since the time that the Government statistics have been kept there have been not too many shifts in balance between the public and private entities during that period of time.

Senator EVANS. Mr. Chairman, I have several other questions I may submit in writing to these gentlemen, but just one last question. In the bill I proposed, I eliminate the right of last amendment by the public. It would be a two-tiered process. The second tier, both applicants, whether public, private, or one of each or several of each, would submit their last best bid.

It would reduce, perhaps come close to eliminating, tie-breakers. But I suspect you have concerns with that. I guess that's the first question: Do you? And if so, I'm just curious about how often that right of last amendment has been used by the public agencies in a relicensing process. Maybe Mr. McKinney knows better. I don't know. Whoever can answer it.

Dr. **Wilson**. I have some concerns about eliminating the right of last amendment. I think that for most important purposes that effectively eliminates the public preference, and I think that there are likely to be situations frequently in the future, especially where you're dealing with relicensing on developed streams and rivers, where the applications of competing entities, if they're both really making a serious effort for it, are going to be substantially the same.

There's not that much latitude when you're talking about a developed facility on a developed river as to how many changes or improvements or modifications can always be made. I don't think that one or two more picnic tables really is a substantial difference that this type of decision ought to be made on. So if we're talking about substantial equality between applications, I would think that that would be something that would be not terribly uncommon, and the removal of the right to final amendment would be a serious undermining of public preference.

Senator **Evans**. Why would it be? It seems to me that what you've just said is contradictory, because you say there's essentially no difference that on a developed river everybody's going to come in with the same thing. Why do you need a chance for final amendment?

Dr. **Wilson**. Those are only two points. I'm not sure that everybody would come in with the same thing originally. And I don't think that they would.

Senator **Evans**. Why not?

Dr. **Wilson**. What I'm saying is, ultimately if everybody gets to a final point there is not likely to be dramatic differences between the two.

Senator **Evans**. You're saying, in other words, that the first time around you wouldn't submit your best bid?

Dr. **Wilson**. That may be a strategic consideration to some, that's possible, on the part of both private and public utilities. And then also, there may be better ideas that are developed through knowledge that's gained through the process itself.

I would like to make one brief comment, if I could.

Senator **Evans**. If you had a two-tiered proposal, a chance for both sides or all sides to see each other's bids, and then have another second round where you submitted your best bid knowing what everyone else had originally suggested, you don't think that's a reasonable enough process? You still ought to allow for that final——

Dr. **Wilson**. It's a weakening of public preference, and I view public preference as a very important tool toward the achievement of competition, and I see competition in this industry as the paramount goal with respect to the licensing question.

I would like to comment on your earlier question that was not addressed to me, on the question of tie-breakers between public entities. As a practical matter, that's not going to happen. Where you have public entities, several of them or even many of them that are interested in a particular hydro site, what you're likely to find is that they are going to join together, as Clark and Cowlitz Counties did in Washington or as the Wisconsin Public Power Group has done in Wisconsin, and they are going to work out ways among themselves in order to develop and share in the hydro facility.

If you're going to have competition in this industry and vigorous rivalry, it's going to be between the publics and the privates, and that's why the legislation that's on the table right now is so dangerous, because you men are sitting there and you're looking at the shortest term possible perspective in terms of whose bill is going to go up by what amount next year.

That's a net zero. Somebody's is going to go up and somebody's is going to go down. But what you're doing by moving away from public preference is killing competition in the long run, and there's a legacy to that.

Senator EVANS. I guess it is hard to believe that the terms "preference" and "competition" go hand in hand.

Dr. WILSON. Oh, no, it's not.

Senator EVANS. I've read your report quite carefully, and frankly, I just think it's a flawed piece of work.

Dr. WILSON. Well, if you have read it I won't bother repeating it. But I would encourage everybody to really take a look at it, because I think the important focus is competition, where and on what front.

Senator EVANS. But you say on the public side, the publics would sort of get together and carve things up. And as I listened to that, I wondered what your attitude would be if there were a similar circumstance where a group of private utilities got together and, instead of competing, sort of carved up the pie and everybody took a piece. Wouldn't you call that antitrust?

Dr. WILSON. That's exactly what they're doing, Senator. And that's why power coming out of the State of Washington, out of the Bonneville Power Authority, is selling for 1 cent instead of for the replacement cost that you talked about earlier this morning. Anaheim and Riverside, CA, would love to get onto the Pacific intertie and buy power from Bonneville for 2 or 3 or 4 cents a kilowatt-hour. The reason they can't get on is Pacific Gas & Electric and Southern California Edison have carved up the Pacific intertie between them. They have not permitted municipal systems in California to get on that intertie who would buy firm power from Bonneville and, as a consequence, they're holding Bonneville captive to dumped power sales because the guys who buy firm can't get there.

Yes; I think that's an anticompetitive problem.

Senator EVANS. Not any more. Not any more.

Dr. WILSON. Oh, yes, it is.

Senator EVANS. Bonneville has an access policy. The prices have gone up very substantially.

Dr. WILSON. Well, you'll have Gordon Hoyt, who is the manager of the Anaheim system, on later today and you can ask him how much power he can get out of the Pacific Northwest over that intertie.

Senator EVANS. No; I'm saying the prices that we sell power to California for have gone up substantially with the access policy.

OK, thank you, Mr. Chairman.

Senator MURKOWSKI. Thank you.

Senator Melcher.

Senator **Melcher**. Alex, in your testimony you have given us some discussion on vigorous competition resulting in additional funds being spent for improvements that are needed on a particular site. I just wonder, do you believe that the General Accounting Office report, while it doesn't indicate that there are situations where that became such a huge endeavor that it added a tremendous amount of cost, how do you believe that should be handled?

Should it be handled in the legislation? Because after all, in the relicensing procedure, if additional improvements are part of that relicensing, granting the relicensing or new license to somebody else, all those costs are going to have to be passed on to the consumer no matter who gets it. Isn't that true?

Mr. **Radin**. Oh, yes.

Senator **Melcher**. So what is the restraint? Do you think the legislation ought to contain the restraint, or guidelines, or some rule of thumb?

Mr. **Radin**. I think in the final analysis we have to depend on the judgment of the Federal Energy Regulatory Commission as to what is or is not a desirable improvement in the project. But my principal point and the conclusion I drew from the General Accounting Office report was that there are some gains both in power production and from an environmental standpoint from the competitive process that otherwise would not have resulted.

Senator **Melcher**. I noted that, and I think it is clearly a significant point.

Earlier in your testimony you state that the underlying issue as you see it is whether there should be competition in the licensing or whether the right to use this public resource should be granted to private parties in perpetuity. Well, there is something that grates about granting something in perpetuity to private parties that is a public I guess properties is as good a word as any to say.

Mr. **Radin**. Yes.

Senator **Melcher**. So we'll set that aside. I think everyone could agree on that. But is there something that you recommend—and if there is I haven't found it—but is there something you recommend in legislation to prevent what I would call carpetbagging, of someone getting the license and then deciding the power isn't really—the best option for them is not the power in the local area?

How would you restrain that?

Mr. **Radin**. Well, there again I think you would have to rely upon the judgment of the Federal Energy Regulatory Commission.

Senator **Melcher**. I guess I'm going to have to look them over a little more closely if we're going to rely on their judgment.

Mr. **Radin**. We don't really always rely on their judgment, either.

Senator **Melcher**. I'm not real confident right at the moment. I think I'd better understand them better if we're going to rely on their judgment in these far-reaching things. Doesn't that have to be protected, though?

Mr. **Radin**. I don't see that that problem has arisen thus far in any significant manner, Senator.

Senator **Melcher**. I'll relax and not worry about it so much.

Mr. **McKinney**. Senator, maybe I could comment on the evidentiary hearing in *Merwin*. There was a great amount of testimony, cross-examination, and evidence submitted as to the use and the purpose of the power. So that subject of the bona fide need. where it was going and how it would get there was all part of the record and it was examined very carefully.

Now if you're questioning the judgment of how they applied it after having that, that's a separate—I guess you've got a separate concern there. But it was considered and evaluated and was a matter of record.

Senator **Melcher**. Well, I've got a couple of concerns—I guess maybe one is farfetched, but the other is very real—on what Bonneville is doing right now with power going into California that we think could be sold cheaper in the Montana aluminum plant, and that is a very current crisis in our part of the woods, and we're not very sure about Bonneville.

Now, Dr. Wilson, you make an argument, and one that I personally don't disagree with, and that is on public preference. Can the situation arise, though, where let's assume public preference is continued. Will a situation arise to where bidding can become so high as to be counterproductive for the consumers in the area, or do you just feel that the judgment of the managers will keep down the bidding, or the wisdom of the FERC people will control it somehow?

Dr. **Wilson**. I think it's conceivable there could be situations where the bidding would become so high that it would be detrimental. I fear that in particular with respect to the investor-owned companies, who have a motivation not merely to get the projects, but have a motivation and the ability to carry the bidding to a level that is beyond the worth of the project itself, but is worthwhile to them strategically to keep the public from getting the project and therefore being able to compete.

How to deal with that, I frankly don't think that you can easily put in standards into legislation to deal with all of these kinds of things that conceivably could come up in some sort of statutory way. I think you do have to rely to a significant extent upon administrative reasonableness in applying the statute.

But sure, the situation that you suggest is a possibility. I think that with public preference there's a tendancy, although certainly not a lot, on the prospect of that danger being less.

Senator **Melcher**. With it being less?

Dr. **Wilson**. Yes.

Senator **Melcher**. I'm not sure why.

Dr. **Wilson**. Well, with public preference and the right of final amendment, as opposed to everybody submitting sealed bids, I think the utility, the private utility is in somewhat of a more restrained situation as to what its final position would be. I say it's not a lock and I would concede the danger you're concerned about could happen in either event.

Senator **Melcher**. Can we be sure—and I ask this of all three of you—that one of the guidelines in any bill that is passed out of this committee—well, two guidelines. One must be retention of service to the people in the area; and two, there has to be a test of reasonableness, or at least a faith of reasonableness if we want to leave it to judgment of FERC, that rates won't be excessively increased.

Are those two valid guidelines?

Mr. **Radin**. Well, our understanding is that in the short run the effect on the rates of the companies that might lose a license might be minimal. I've seen one estimate that if the licenses of Pacific Gas & Electric Co. that are being contested are transferred to a public agency, it might result in about a penny-a-day increase in the residential rates of their consumers.

So I don't know that the magnitude of these projects in most cases and the proportion that they represent of the total capacity of most utilities would warrant any significant increase in rates to the consumer if those projects were transferred in ownership from the present licensee to another licensee.

So I don't think that is likely to happen, just because these projects represent a relatively small part of the total capacity of most utilities.

Dr. **Wilson**. I would like to underline that. Even if you take a utility that has a good deal of hydropower, like the Montana Power Co., the number and the magnitude of the projects and the timing of the projects is such that the effect on consumers is going to be very, very small compared to the effect on consumers that you had from other things like coal strip. It is going to be infinitessimal compared to that.

And you go to your typical constituent in Billings or Helena or Great Falls or any of those places that have experienced what is being experienced right now because of the Montana Power Co.'s escalating costs—and I do not mean to pick on Montana Power; we could go to a utility in almost any State and have similar corresponding problems—and say would you rather have the elimination of public preference which will save you a half a dollar a year on your electric bill or would you rather have the perpetuation of public preference and some competitive pressure on the investor-owned utilities to operate more efficiently, to develop more reasonable generation expansion plans, to hold costs down, would you give up competitive pressure in order for the small amount that public preference might get you in the short run, I think even the average guy on the street that's experienced what the investor-owned utilities are able to do outside of a competitive environment would say well let's try to get some competition in this industry and try to provide for better results in the long term.

Senator **Melcher**. I see you nodding your head, Mr. McKinney. I guess you agree.

Mr. **McKinney**. [Nods affirmatively.]

Senator **Melcher**. What about the——

Senator **Evans**. If the Senator from Montana would yield for just one small observation, it is not all on one side of the issue. I suspect there are a lot of ratepayers in the Pacific Northwest who aren't too happy about the monumental public agency fiasco with the public power supply system.

Dr. **Wilson**. Well, that's the beauty of competition is that it will be nondiscriminatory. It will place the same pressures on both.

But let me point out that there's a difference between a WPPSS situation and the Seabrooks and the Midlands and the Diablo Canyons. The people responsible for WPPSS are by and large gone. The people who perpeuated these things on the private side of the fence are still around running those companies trying to bail themselves out at ratepayers' expense.

So I don't think there's any question that you have a great deal more consumer accountability on the public side—not that public managers are any less capable of making blunders, but the incentives and the motivations are different, because the consequences in terms of their responsibility and their stockholders is more direct and more furious.

Senator EVANS. We have no assurance you're going to get anybody any better in the public agencies. It's like people running for political office who do not necessarily have any background whatsoever——

Dr. WILSON. It's sort of like politics, though. At least by having an election——

Senator MURKOWSKI. I hate to interrupt this discussion, but I think we could continue it at a more appropriate extensive point. I believe Senator Melcher is still on questions, and after this panel I am going to limit the questions to a time frame. We still have 18 more witnesses to be heard from.

Senator MELCHER. Mr. McKinney, I saw you nodding your head, so I know you have agreed with the statements made by Alex and Dr. Wilson, but what about a comment on whether one of the guidelines has to be an assurance of power for the present consumers?

I think the last thing that I could survive in Montana would be to set up the relicensing procedure where some entities acquired them and they wheeled the power out of Montana to a new aluminum plant down in Arizona or somewhere and our plant in Columbia Falls closed the same year. I don't think that would be politically very popular, but what about this idea that there is power in our area. What about the possibility of it in relicensing being moved out of the area?

Mr. MCKINNEY. I don't—we try—I kind of look at it as grabbing the tail on the dog and trying to solve all types of major problems through this relicensing situation. I have to be aware that these equities are of incentive rates for aluminum companies, of residential exchange payments. I looked up some figures, and I saw that Pacific Power and Light, who is complaining about losing *Merwin* and the rate impact, is more than adequately protected under the Regional Power Act.

Over a 5-year period they get almost $1 billion, a large amount of which comes from our service areas, to solve this other type of supply economic problem. And there is no way in the world that the relicensing process, the Merwin process, is a fraction as a matter of using it for a tool to solve these other types of problems. I don't think you can solve these other things through relicensing, and I think it is overstating the economic impact of relicensing when you think it might.

Senator MELCHER. I'm not thinking so much of it solving as creating a new problem. Are you saying that it could not, or it would be highly unlikely to create new problems such as moving the very cheap power? I suppose some of this power could be, what, five mil power, five to six mil?

Mr. McKinney. Again, with regard to *Merwin*, the regional situation on loads and resources is unchanged by *Merwin*. It happens that the Pacific Power and Light Company is surplus and will be for half of its license term. Even though it appears to be low cost power, they are not out building plants now.

They are trying to sell their shares in coal strip, and they are selling them for a long term. So you can almost argue that in the short term losing *Merwin* would be an economic incentive for Pacific, because the intertie is loaded up and so forth, and no one in the northwest is going to build a new coal plant to replace a transfer license on Merwin at least until the turn of the century.

I think we have heard that said so many times, and we have heard these figures in the record about $700 million and $800 million. Those were overstatements. They are not related to the real world, and I think it just puts the whole relicensing problem in the wrong economic context.

I know that is a long answer to your short question.

Senator Melcher. Thank you all very much.

Senator Murkowski. Thank you. I have one question. When a municipality takes over a project, the original licensee receives the net investment. Is that not correct?

Mr. Radin. Under the present law, that's correct.

Senator Murkowski. But when another applicant takes over a municipal project, the municipality receives just compensation. Is that not correct?

Mr. Radin. Do you want to answer that?

Dr. Wilson. I do not believe that is correct, no, and it shouldn't be. It should be even-handed.

Senator Murkowski. I believe that is under the 1953 act, isn't it?

Dr. Wilson. You're talking about Federal?

Senator Murkowski. Yes.

Dr. Wilson. You're talking about Federal condemnation. There are differences between condemnation and license.

Senator Murkowski. I understand. But one is net investment and the other is just compensation.

Dr. Wilson. I'm not here to support that. I would support net investment either way.

Senator Murkowski. My point is, would you not agree, there is an inconsistency in the formula?

Dr. Wilson. I think that the 1953 matter refers to condemnation, and, therefore, I don't think that you're talking about a legal inconsistency, because they are two different processes, but that is a legal question.

Senator Murkowski. I'm under the impression that a municipal project would receive "just compensation" as opposed to the other receiving a net investment when a municipality takes over from an original leasee. I'm trying to point out or get your comments on whether you recognize that this is a just inconsistency or an inconsistency of any consequence. It would appear that there should be uniformity in the compensation issue as opposed to two forms for compensation.

Dr. Wilson. I'd agree that there ought to be uniformity, and I'd also observe that there is nothing unjust about net book value.

That is a pretty standard valuation process in the electric utility industry.

Senator MURKOWSKI. Well, I'm glad we all agree on uniformity. So I guess we can start from there and go almost anyplace.

Gentlemen, you have been most patient with my colleagues, and I think most responsive, and most honest, and we thank you. You are excused. And I am sure that you are relieved.

We will call the next panel, panel No. 3, Mr. Loren Hov, director of energy management, Stauffer Chemical, Westport, CT; Mr. Logan Lanham, vice president, public affairs, Idaho Power Co.; Mr. Vincent A. O'Reilly, assistant to the international president, International Brotherhood of Electrical Workers; and Mr. Robert Shade, chairman, American Paper Institute, Hydro Committee, director, energy and procurement, Boise Cascade Corporation, Boise.

With the indulgence of my colleagues, I am going to ask that you keep your questions to 5 minutes, and, of course, we will continue the policy of the witnesses keeping their presentations to 5 minutes. I would ask that you proceed in any manner that you wish. I appreciate the fact that you have been with us most of the day, and hopefully seats are a little easier to get than they were this morning.

Go ahead and begin, whomever.

STATEMENT OF ROBERT A. SHADE, DIRECTOR OF ENERGY AND PROCUREMENT SERVICES, BOISE CASCADE CORP., ON BEHALF OF THE AMERICAN PAPER INSTITUTE AND THE NATIONAL FOREST PRODUCTS ASSOCIATION

Mr. SHADE. Mr. Chairman, members of the subcommittee, my name is Robert A. Shade. I am the director of energy and procurement services for Boise Cascade Corporation, Boise, ID. I represent the American Paper Institute and the National Forest Products Association today. Jointly, these trade associations represent the manufacturers of this Nation's pulp paper and solid wood products. I will briefly summarize the statement that we have submitted for the record, and I would ask that that statement be accepted into the record.

Senator MURKOWSKI. It will be entered into the record.

Mr. SHADE. We are concerned that Congress in developing legislation to address the relicensing of hydroelectric facilities may limit its focus only to public versus investor-owned utility issues. We applaud your subcommittee in recognizing that another group of hydropower licenseholders, the forest products industries, and other industrial hydro site owners with unique circumstances will be affected by what this subcommittee does.

We encourage you to focus these discussions toward producing legislation that achieves the most efficient use of hydropower resources. To this end, we in the forest products industry would hope that the committee will not attempt to enlarge the scope with this issue beyond the question of hydroelectric relicensing.

Extraneous provisions regarding water power and the sale of electricity such as those in S. 1219 should not be part of this debate. Such legislation should be considered independent of this issue. The question that needs to be resolved due to perceived ambiguities in the Federal Power Act and to conflicting opinion of the Federal Energy Regulatory Commission is what happens to a hydroelectric license at the relicensing stage.

We would contend that with few exceptions the most positive result can be obtained by issuing a license to the present licenseholder. We support the approach embodied in S. 426, and we have only minor differences with the language of S. 403.

We recognize that it may be necessary to set criteria in order to determine whether the application of an existing licensee is in fact best adopted. A list of suggested criteria for a nonutility licenseholder are in our written statement.

If companies within the forest products industry were to lose their hydroelectric sites, they would be forced to increase their electrical demand on the servicing utility and/or use other fuels to generate electric power.

Our industry is committed to energy conservation, as evidenced by our leadership in the areas of self-generation and cogeneration of electric power. Between 1972 and 1984 the paper industry achieved a reduction of 39.5 percent in its use of fossil fuel and purchased energy, including purchased electricity per ton of product. The use of hydroelectric power is an important component of the forest product industry's continued commitment to energy conservation.

We include in our written statement several case studies which illustrate the adverse economic impact of losing a hydroelectric license at a site.

In conclusion, the forest products industry is very concerned that any legislation on hydoelectric relicensing needs to address the industrial licenseholder. We in the forest products industry have developed it for the public good by building factories and other facilities that have often provided a major support of local economies.

We ask that any resolution of the relicensing question realize that this issue is not simply that between ratepayers of two utilities. The greater issue is that those who have utilized hydroelectric power consistent with the public interest in the past be allowed to continue to do so.

Thank you very much, Mr. Chairman.

Senator MURKOWSKI. Thank you very much, Mr. Shade.

[The prepared statement of Mr. Shade follows:]

STATEMENT
OF
ROBERT A. SHADE
REPRESENTING THE
AMERICAN PAPER INSTITUTE
AND THE
NATIONAL FOREST PRODUCTS ASSOCIATION

BEFORE THE

SENATE SUBCOMMITTEE ON WATER AND POWER

ON

HYDROELECTRIC RELICENSING

JUNE 11, 1985

Mr. Chairman, Members of the Subcommittee, my name is Robert A. Shade and I am Director of Energy and Procurement Services for Boise Cascade Corporation in Boise, Idaho. I represent the American Paper Institute, or API, and the National Forest Products Association, or NFPA. Jointly, these trade associations represent the manufacturers of this nation's pulp, paper, and solid wood products. I chair NFPA's Energy committee and I also chair API's Hydropower Committee.

Mr. Chairman, we in the forest products industry sincerely appreciate the opportunity to relate to you our interest in the issue of relicensing hydroelectric facilities. This is a particularly contentious issue. The Federal Energy Regulatory Commission, or FERC, has reviewed various cases on relicensing and has arrived at differing conclusions. Suffice it to say that Federal legislation is needed to clarify this situation.

The purpose of today's hearings is to discuss the issue of hydroelectric relicensing, and, specifically, three pending bills which address this issue in differing ways. Companies in the forest products industry have historically located paper mills and saw mills near major waterways, and the resources of these waterways have been used in the manufacture of paper and, in different ways, have also been used in the production of solid wood products. Thus, it is not surprising that a number of forest products companies--both big and small ones, I might add--have acquired hydroelectric licenses under the Federal Power Act and are operating these sites in conjunction with their manufacturing process.

I state this early on, Mr. Chairman, because too often I see the issue of hydroelectric licensing being discussed as a question of public utilities versus investor-owned utilities. Although this is one aspect of the debate, there are non-utility license holders as well. We non-utility license holders also have an interest in this debate and its outcome.

We therefore urge that the debate on these three bills not focus only on the question of utilities, their ratepayers, and the question of preference for public utilities. These are important issues to be sure, but they are not the only issues, and they do not apply to non-utility license holders. This debate should not devolve into a discussion based on the greatest good for the greatest number, but rather how can Congress legislate to produce the most efficient use of hydropower for the United States. What can Congress do to ensure that hydropower is available for industrial and residential energy needs which then benefit the people and communities of our Nation.

To this end, we in the forest products industry would hope that the Committee will not attempt to enlarge the scope of this issue beyond the relatively simple question of hydroelectric relicensing. Extraneous provisions regarding water power and the sale of electricity such as those in S. 1219, should not be part of this debate. And I say this, Mr. Chairman, in spite of the fact that our industry would favor some of this language, such as the provisions on "wheeling," that Senator Metzenbaum has included in his legislation. Such legislation should be considered independent of this issue. The question that needs to be resolved -- due to perceived ambiguities in the Federal Power Act and to conflicting opinion at the Federal Energy Regulatory Commission -- is what happens to a hydroelectric license at the relicensing stage.

We would contend that in most instances the most positive result can be obtained by reissuing a license to the present license holder. We support the approach embodied in S. 426, and we have only minor differences with the language of S. 403. We recognize that it may be necessary to set criteria in order to determine whether the application of an existing licensee is in fact best adapted. API and NFPA believe that, when judging the application of a non-utility license holder, some of the more important criteria that must be considered in a contested relicensing dispute, are:

1) The availability of comparable alternative project sites in the region and the attendant public benefits of developing those sites separately rather than merely replacing one operator with another;

2) The potential effects on a region in situations when the competing applicant intends to wheel the power out of the area in which the project is located;

3) The industrial and other uses of the water in addition to the generation of power;

4) The disruptive effects of transferring the project to a new owner-operator, including problems of disruption of ongoing operations and related unemployment effecting the economic viability of a region.

5) The degree to which the existing hydroelectric facility has been integrated into ongoing business operations;

6) Whether the advantages of waterpower would be lost or dissipated if distributed among a substantially larger group of potential users;

7) Whether the original licensee has adequately operated the project in the past; and the degree to which the applicant competing for the license has had experience in operating hydroelectric facilities; and

8) The increased use of oil, particularly imported oil, that might result from deprivation of the hydroelectric license.

API and NFPA submit that these considerations -- although not necessarily determinative in any one case -- should at least be considered before there is any reallocation of industrial waterpower.

If companies within the forest products industry were to lose their hydroelectric sites, they would be forced to increase their electrical demand on the servicing utility and/or use other fuels to generate electric power. Our industry is committed to energy conservation, as evidenced by our leadership in the areas of self-generation and cogeneration of electric power. Between 1972 and 1984, the paper industry achieved a reduction of 39.5 percent in its use of fossil fuel and purchased energy (including purchased electricity) per ton of product. The use of hydroelectric power is an essential component of the forest product industry's continued commitment to energy conservation.

A few case studies will help to illustrate the harmful effect that might occur should hydroelectric licenses be lost.

- The Merrimac Paper Company of Lawrence, Massachusetts, is a small manufacturer of specialty papers. Its 1.1 MW hydroelectric facility's license expires in 1999. In 1984 it generated 6,700 MWH of hydroelectricity. That same year the company purchased 8,500 MWH of electricity from its local utility, Massachusetts Electric Company, at an approximate cost of $600,000. Were it to lose this hydroelectric power, replacement electricity would have to come from the local utility at a cost of at least $475,000 annually, increasing current purchased electric costs by 79%.

- Boise Cascade Corporation's mill in Rumford, Maine, manufactures fine and coated papers. Its 35 MW hydroelectric facility produced 272,600 MWH of electricity in 1984. Slightly more electricity was produced in 1983 due to higher stream flows. In 1984, the mill purchased 221,715 MWH of electricity from its local utility, Central Maine Power, at a cost of approximately $11 million. The mill also produced 140,189 MWH of electricity in 1984 through cogeneration, and sold 1,423 MWH to the town of Rumford. Replacement of the mill's hydroelectric power would likely cost around $13.5 million annually, increasing current purchased electric costs by 123%.

- The Mosinee Paper Corporation employs almost 600 people at its Mosinee, Wisconsin, mill. The company chose to locate its mill at Mosinee nearly 75 years ago because of the natural resources, the forests and water supply. The mill manufactures industrial and specialty papers. The company's license for its 3 MW hydroelectric facility expires in 2004. In 1984 the hydroelectric facility

> generated 26,300 MWH at an approximate cost of $600,000, and cogenerated an additional 121,000 MWH of electricity.
>
> Should the company lose its self-generated hydroelectric power, it would replace it with electricity purchased from its local utility at an approximate annual cost of $1.2 million, essentially tripling its current purchased electric costs.

In sum, although the overall amount of industrially developed hydropower in this country is small, its import to the industrial facility and the community in which it is located cannot be overstated. In deciding contested cases involving the relicensing of industrial hydroelectric sites, particular attention must be paid to the damage that reallocation of power crucial to an industry can cause. For these reasons we support the concept embodied in S. 426 that the holder of a hydroelectric license should have a preference in the relicensing process. We in the forest products industry believe that we have developed and utilized hydropower resources consistent with the public interest, and that, in many cases, the hydropower has provided the economic foundation for communities. Loss of these resources would be deleterious to the manufacturing facility and the community in which it is located.

In my statement I have not mentioned the question of compensation. It obviously needs to be addressed, since the concept of net investment -- which will in many cases yield no compensation -- is clearly not equitable. Should the Subcommittee decide to pursue this legislation, we would be eager to work with you to arrive at an equitable answer to the compensation question.

In conclusion, the forest products industry is very concerned that any legislation on hydroelectric relicensing needs to address the industrial license holder. We in the forest products industry have developed it for the public good by building factories and other facilities that have often provided the major support of local economies. We seek no special favors. We only ask that any resolution of the relicensing question realize that this issue is not simply that of ratepayers of two utilities. The greater issue is that those who have utilized hydroelectric power consistent with public interest in the past be allowed to continue to do so.

Senator MURKOWSKI. Mr. O'Reilly.

STATEMENT OF VINCENT A. O'REILLY, ASSISTANT TO THE INTERNATIONAL PRESIDENT, INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS

Mr. O'REILLY. My name is Vincent O'Reilly, assistant to the international president of the International Brotherhood of Electrical Workers. I am appearing today before this subcommittee on behalf of Charles H. Pillard, international president of the IBEW. The IBEW represents approximately 1 million members employed in electrical construction and maintenance, manufacturing, telephone utilities, electric gas and water utilities, radio and TV broadcasting, cable TV, and the electric sign industry.

Approximately 200,000 of our members are employed in the electric utility industry by investor-owned, rural electric cooperatives, municipal, Federal, State, and other types of governmental utilities. As workers in the industry, we do have a concern over the continued stability of the use of low cost hydroproduced electricity.

Also, IBEW members are consumers in all 50 States, and any change in existing hydro ownership can affect residential rates, as well as the cost of power to industry where many of our members are employed.

The IBEW is, of course, concerned about how the relicensing would affect the loss of work opportunities of our members; but in some situations we represent both the present licensee and the petitioner for the license renewal.

IBEW local 1245 represents 18,000 employees of the Pacific Gas & Electric Co., and also the employees of the petitioner, the city of Santa Clara, which wants the license at the Mokelumne project. Again, at PG&E a group of 18 cities and districts in southern California want the licenses at the Rock Creek/Cresta project and the Haas-Kings River project. The IBEW represents the employees at several of the utilities in this group.

In the State of Washington the Clark-Cowlitz Operating Agency wants the Merwin Dam license which is presently held by Pacific Power & Light Co. Again, the IBEW represents the employees at all the utilities involved. The IBEW's position today is the same as it was in 1978. In our statement at that time to the Federal Energy Regulatory Commission concerning the same issue of hydrorelicensing preference.

The IBEW believes if the present licensee is operating the facility efficiently and in the best interest of its customers then the present licensee shall have the preference when it comes to relicensing. This would also apply if the present IOU versus Municipal situation were reversed. That is, the governmental utility should be allowed to keep its license over attempts by an IOU to take it over.

Providing the governmental utility has operated the facility efficiently and in the best interest of its customers, the consumers served by the present licenseholder are the ones that suffer the most if preference in relicensing is allowed to be given to other than the present licensee.

Advocates of municipal takeover of hydro facilities often say that the Nation's rivers and waterways belong to all of us. That phrase makes a case for municipal preference in relicensing. Of course, the rivers and waterways belong to all of us. Private hydroprojects like publicly funded projects make it possible for the majority of customers to utilize the power potential in those rivers. The water is unchanged. It returns unharmed to continue its journey downstream.

The only people profiting from the use of the water are the millions of consumers benefiting from lower cost electricity. That is, the people's use of their waterways. We have looked at the loss of hydropower and its effect on the residential consumers, but we also must consider the effect on the many electric energy intensive industrial customers.

As we all know, low cost energy is essential to the aluminum and steel industries. We have already observed the effects of foreign competition in these industries. In the Northeast, 56 hydroproject licenses will expire by January 1, 1994, with a capacity of over 741,000 kilowatts.

In the Southeast, there are 16 hydroelectric projects with a capacity of over 631,000 kW that also will expire. In total, 41 States have hydropower generating facilities, and by January 1, 1994, 168 projects in 28 States, many with more than one dam, will be up for relicensing.

The IBEW supports S. 426 by Senator Wallop and its more than 26 cosponsors since it does not change in any way or dilute the municipal preference provisions of the Federal Power Act in cases of initial permits or original licenses. Also, and even more important, it does not disturb in any way the marketing preference existing laws give the public agencies for Federal power.

S. 426 does provide that any utility which has built and properly operated a hydroelectric project, and which demonstrates it will continue to operate the project in the public interest, will be able to relicense it. Thus, its ratepayers, who have already paid the costs of building and maintaining the project, will be allowed to continue enjoying the benefits of the project's low cost power. S. 426 is a narrow measure that deals with preference in only a very limited and precise way.

The IBEW also supports with reservations S. 403 by Senator Bennett Johnston of Louisiana. The legislation does an excellent job of setting forth criteria which protects consumers served by existing licensees. There is one failure, in our opinion, in that it does not have a compensation provision in the event of a license transfer.

One of the strongest arguments in favor of legislation such as S. 426 was presented last year by the general manager of the Public Utilities Department of the city of Anaheim in California.

Testifying last May before the House Subcommittee on Energy Conservation and Power, Mr. Gordon Hoyt came right to the point when he told the comittee that Anaheim was going after low-cost power wherever it could.

No matter what the cost to consumers in the areas Anaheim might try to take, Mr. Hoyt contended that the power was there and so long as the law allowed, Anaheim was going to grab it for Anaheim.

That is what the relicensing controversy is all about: Unfair competition in the form of taking over someone else's power supply that the other party built and paid for. I might add that both the city of Anaheim and PG&E in northern California are both good employers of IBEW members.

To sum up the position of the IBEW, under the licensing provisions of the Federal Power Act, most hydroelectric projects will have been built and operated for 50 years when the original license expires. The utility's customers will have paid for the costs incurred during those years through their electric rates. These customers should continue to receive the benefits of this low-cost, relatively low-cost fuel-free efficient source of electricty. If the FPA is not clarified, the consumers who will have for many years paid for and received the benefits of the hydroplants, may be deprived of all of this.

Senator MURKOWSKI. Mr. O'Reilly, I must ask you to summarize your remaining remarks.

Mr. O'REILLY. Yes. Our society does not condone bank robbery, and it should not condone the taking of the power supply of one utility for the benefit of another. The IBEW therefore supports S. 426 and urges your support.

Thank you, Senator.

[The prepared statement of Mr. O'Reilly follows:]

TESTIMONY OF

VINCENT A. O'REILLY

FOR

CHARLES H. PILLARD, INTERNATIONAL PRESIDENT

OF THE

INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS

ON HYDRO-ELECTRIC RELICENSING

BEFORE THE

SENATE SUBCOMMITTEE ON WATER AND POWER

JUNE 11, 1985

My name is Vincent A. O'Reilly, Assistant to the International President, International Brotherhood of Electrical Workers. I am appearing today before this Senate Subcommittee on behalf of Charles H. Pillard, International President of the International Brotherhood of Electrical Workers. The I.B.E.W. represents approximately one million members employed in electrical construction and maintenance; manufacturing; telephone utilities; electric, gas, and water utilities; radio and TV broadcasting; cable TV and the electric sign industry. Approximately 200,000 of our members are employed in the electric Utility Industry by investor-owned, rural electric cooperatives, municipal, federal, state, and other types of governmental utilities. As workers in the industry, we do have a concern over continued stability of the use of low cost hydro-produced electricity.

Also, IBEW members are consumers in all fifty states, and any change in existing hydro ownership can affect residential rates, as well as the cost of power to industry where many of our members are employed.

The I.B.E.W. is, of course, concerned about how the relicensing would affect the lost of work opportunities of our members; but in some situations we represent both the present licensee and the petitioner for the license renewal.

IBEW Local Union 1245 represents 18,000 employees of the Pacific Gas and Electric Company (PG&E), and also the employees of the petitioner, the City of Santa Clara, which wants the license at the Mokelumne Project. Again, at PG&E a group of 18 cities and districts in Southern California want the licenses at the Rock Creek/Cresta Project and the Haas-Kings River Project. The IBEW represents the employees at several of the utilities in this group.

In the State of Washington, the Clark-Cowlitz Operating Agency wants the Merwin Dam License, which is presently held by the Pacific Power and Light Company. Again, the IBEW represents the employees at all the utilities involved.

The IBEW's position today is the same as it was in 1978 in our statement at the time to the Federal Energy Regulatory Commission concerning this same issue of hydro-relicensing preference. The IBEW believes if the present licensee is operating the facility efficiently, and in the best interest of its customers, then the present licensee shall have preference when it comes to relicensing. This would also apply if the present I.O.U. vs. Municipal situation were reversed. That is, the governmental utility should be allowed to keep its license over attempts by an I.O.U. to take over it, providing the governmental utility has operated the facility efficiently and in the best interests of its customers.

The consumer served by the present license-holder are the ones that suffer the most if preference in relicensing is allowed to be given to other than the present licensee.

Advocates of municipal takover of hydro facilities often say that the nation's rivers and waterways belong to all of us—as if that phrase makes the case for municipal preference in relicensing.

Of course the rivers and waterways belong to all of us. Private hydro projects, like publicly funded projects, make it possible for the majority of customers to utilize the power potential in those rivers.

The water is unchanged, it returns, unharmed, to continue its journey downstream.

The only people profiting from the use of the water are the millions of consumers benefitting from lower cost electricity.

That is the people's use of their waterways.

We have looked at the loss of hydro power and its effect on the residential consumers, but we also must consider the effect on the many electric energy intensive industrial customers. As we all know, low-cost energy is essential to the aluminum and steel industries. We have already observed the effects of foreign competition in these industries.

In just one State, the State of Michigan, the investor-owned utilities could lose 166,505 KW of hydro power if they are not allowed to retain their licenses at the hydro projects. The loss of this type of power generation would certainly result in higher KWH costs. I am sure the Auto Industry and its suppliers would look seriously at moving out of Michigan if the costs of electric power were increased. The workers and consumers of Michigan do not deserve the prospects of any more problems.

In the Northeast, 56 hydro project licenses will expire by January 1, 1994, with a capacity of 741,247 kilowatts. In the Southeast, 16 hydro-electic projects, with a capacity of 631,880 KW, will also expire. In total, 41 states have hydro-power generating facilities; and by January 1, 1994, 168 projects in 28 states, many with more than one dam, will be up for relicensing.

The IBEW supports S. 426 by Senator Wallop and its more than 26 co-sponsors since it does not change in any way or dilute the municipal preference provision of the Federal Power Act in cases of initial permits or original licenses. Also, and even more important, it does not disturb in any way the marketing preference existing laws give to public agencies for federal power.

S. 426 does provide that any utility which has built and properly operated a hydro-electric project, and which demonstrates it will continue to operate the project in the public interest, will be able to relicense it. Thus, its ratepayers, who have already paid the costs of building and maintaining the project, will be able to continue enjoying the benefits of the project´s low-cost power. S. 426 is a narrow measure that deals with preference in only a very limited and precise way.

In addition, S. 426 does not alter the federal government´s existing authority under the FPA to take over a project upon expiration of its license. Moreover, S. 426 specifically provides for FERC´s denying an IOU´s application to relicense its project if FERC decides it would not satisfy Section 10(a) of the Federal Power Act.

The IBEW also supports with reservation S. 403 by Senator Bennett Johnston of Louisiana. The legislation does an excellent job of setting forth criteria which protects consumers served by existing licensees. There´s one failure, in our opinion, in that it does not have a compensation provision in the event of a license transfer.

One of the strongest arguments in favor of legislation such as S. 426 was presented last year by the General Manager of the Public Utilities Department of the City of Anaheim in California.

Testifying last May before former Congressman Ottinger's Subcommittee on Energy Conservation and Power, Gordon Hoyt came right to the point when he told the subcommittee that Anaheim was going after low-cost hydro wherever it could.

No matter what the cost to consumers in areas Anaheim might plunder Mr. Hoyt contended that the power was there and so long as the law allowed, Anaheim was going t grab it for Anaheim.

Mr. Hoyt stated that Anaheim, a Southern California city, was after Northern California hydro because Anaheim thought preference gave it a chance to seize the power.

That's what the relicensing controversy is all about—unfair competition in the form of taking some one elses power supply that the other party built and paid for.

Give us preference and we'll grab the power. The heck with the consumer left in the lurch. Mr. Hoyt told it like it is.

I might add that both the City of Anaheim and PG and E in Northern California are both good employers of IBEW members.

To sum up the position of the IBEW, under the licensing provisions of the Federal Power Act (FPA) most hydro-electric projects will have been built and operated for 50 years when the original license expires. The utility's customers will have paid for the costs incurred during those years through their electric rates. These customers should continue to receive the benefits of this relatively low-cost, fuel-free, efficient source of electricity. If the FPA is not clarified, the consumers who have for many years paid for and received the benefits of the hydro power plants, may be deprived of all of this.

When a utility loses a fuel-free source of generation, it must be replaced by a higher cost fuel, which means an automatic fuel adjustment upward. Those who can afford the higher rates the least, the poor and elderly, will suffer the most.

Higher electric utility rates do not only affect the residential consumer, they have a profound effect on the industrial, commercial, and agricultural consumer. In these cases, the higher electric rate is passed on to the consumers of all commodities that are produced in the area impacted by a relicensing decision that revokes the license held by an investor-owned utility. Also, if a hydro project is taken from an investor-owned utility, the lost tax base in the jurisdiction of the project will have to be made up from other sources, and that will be the local citizens.

Investor-owned utilities currently operate 377 licensed hydro-electric projects. Of these, 189 projects will be up for relicensing in the next 10 years. If Congress does not act and the municipal preference issue on relicensing is not clearly defined to be in favor of the existing licensee, millions of consumers will be adversely affected.

The IBEW believes that present licensees, whether investor-owned, municipal, any other governmental subdivision, or other licensees and their customers, should continue to receive the benefits of the hydro-electric power by being relicensed, provided the existing licensee is in compliance with the public interest standards in the Federal Power Act.

We do not believe S. 426 or S. 403 is an attack on municipal preference or the merits of public versus private power. Our concern is for the consumer who is served by a utility which may lose the license it has held for some 50 years.

Our society does not condone bank robbery. It should not condone the taking of the power supply of one utility for the benefit of another.

The I.B.E.W. supports S. 426 and urges your support.

Senator MURKOWSKI. Thank you very much, Mr. O'Reilly. I appreciate that, and I appreciate your accommodating us on time.

Mr. Lanham.

STATEMENT OF LOGAN LANHAM, SENIOR VICE PRESIDENT, PUBLIC AFFAIRS, IDAHO POWER CO.

Mr. LANHAM. Thank you, Mr. Chairman. My name is Logan Lanham of Boise, ID, and I am the senior vice president of Public Affairs for the Idaho Power Co. I will summarize my testimony.

Senator MURKOWSKI. Mr. Lanham, your testimony will be entered in the record.

Mr. LANHAM. We appreciate the opportunity to present our position and views on hydro relicensing to clarify that a preference for States and municipalities does not apply against the original or operating licensee and relicensing procedures. We are appearing in support of Senate bill 426.

The Idaho Power Co. is a small but independent investor-owned utility in southern Idaho serving eastern Oregon and northern Nevada. We serve approximately 270,000 customers in 20,000 square miles. Our customers have been fortunate in the past as the company has been able to rely heavily on low-cost hydroelectric generation to supply their energy needs.

We are one of the few utilities in the Nation with a primary hdyrobase having more than 70 percent of its generation supplied by 17 generating plants in Idaho on the Snake River and its tributaries. In a good year or above average water year, actually in 1982, 82 percent of our actual generation was supplied by hydropower.

The remaining balance of our energy comes from three coal-fired plants in which the ownerships are shared with other utilities. At a time of surplus—and we have surplus hydro—we supply other utilities such as utilities in southern California who burn high-cost gas and oil and allow them to use their surplus. Consequently their customers also benefit at a time of high water.

It is our opinion that the authors of the Federal Power Act did not intend that States and municipalities would ever have a preference in the relicensing of hydroelectric projects. If they had, they would have spelled out a preference in section 15 as they did in section 7 of the act.

In fact, we believe that in section 15 of the act it was their intent not to grant municipal or State preferences against the original licensee in the relicensing procedure. In the past few years, we have relicensed hydroprojects. We are in the process of relicensing another. To date, we have not had a municipality——

Senator MURKOWSKI. Excuse me. I am going to have to go and vote. There are about 4½ minutes remaining. I am going to ask that you proceed with your testimony. I am expecting Senator Evans and Senator Melcher back momentarily. So if you will please excuse me, please proceed. I will be right back.

Mr. LANHAM. Thank you, Senator.

To date we have not had a municipality or a State file a competing application. We believe that this is probably due to the fact that we work real closely with the municipalities in our State.

However, we have had municipalities from the Northwest such as the cities of Seattle and Tacoma who have acquired hydroelectric output within our service area, and as Senator Melcher was talking about, this could be the carpetbaggers he mentioned, but nevertheless they have filed for licenses within our service area on the very sites that the company has already engineered and had environmental studies on and were turned down by the FERC because of lack of need.

Not only that, they are attempting to purchase other hydro facilities under the Public Utility Regulatory Policy Act. Within the last 2 years, we have seen FERC issue a license to a municipality and at the same time reject the license application to an investor-owned utility, and virtually within the same timeframe where the municipality was issued the license stating that need was not the issue, while the private utility was denied or dismissed on the grounds that the private utility could not show need.

Both of these facilities were in the Northwest, both in the same timeframe, and they were not more than 100 miles apart. It appears that FERC presently has a different requirement for municipalities than it does for private utilities.

In 1967, as has been mentioned before, FERC advised Congress that State or municipality preference did not apply against the original licensee, and subsequent to that they have changed their position three times, and that is one of the reasons why we are supporting 426 to clarify the Federal Power Act once and for all on the preference and the hydrorelicensing issue.

The committee is aware that there are terms and conditions imposed upon utilities seeking relicensing of hydroprojects. We feel that the Federal interest has already been met by the facility having been previously licensed and constructed as well as adding a reliable supply of energy and capacity to the area. You know that within 3 to 5 years when a license expires that the utility has to report to FERC its intent to file for a relicense and after that the procedures for relicensing are very similar to the ones in licensing the project.

We think one important condition should be: Has the utility shown good stewardship in the project? Another question should be: Is it in the public interest to have this project relicensed? Proposed improvements to the project planned to be licensed, relicensed, should consist of upgrading, operating, refurbishing, new generation, environmental improvements, fish and wildlife considerations, and other investments the utility plans to ensure that the generating facility continues to retain its generating capabilities as well as its economic values.

Now if the utility does not comply with the regulation and fails to conduct a complete evaluation of the existing project or a fresher look, then a competing application may be justified.

However, you will find that our company's projects are truly operated and utilized in the public interest. Our company has one license alone, that when it expires, if it is not renewed to the company, it would deprive the company and its customers of nearly 75 percent of its total hydrogeneration. It is not necessary to tell you that it would be a disaster for our customers.

If the hydrorelicensing preference in the Federal Power Act is not clarified, you can rest assured this project will have a competing application for license filed. Even after 50 years with quality maintenance and improvements, the facility generates nearly as much energy or perhaps even more than it did when it was new and probably good enough for another 50 years.

When hydroelectric projects are taken over, the lost energy subsequently has to be replaced by another form of energy such as gas, oil, coal, or nuclear, and the capacity from the facility, whose capacity and generation are equal to the facility lost, and inevitably the new generating facility costs are substantially more installed capacity and its generation costs are substantially more and greater than the cost of the hydroelectric facility it replaces.

This can necessitate an astronomical rate increase to the existing customers who have to foot the bill. Is that fairness and equity? Is this in the public interest? I doubt it.

Furthermore, why should a small segment of the people served by a municipality or county gain a tremendous economic advantage over a majority of their neighbors who are served by a private utility? Is this in the public interest? Again it is simply not fair or equitable. The loss of one of our licensed projects would necessitate the construction of nearly three 500,000-kilowatt thermoplants at an untold and unnecessary added expenditure to our ratepayers and at rates far higher than those of today.

Our rates, thanks to hydro facilities, are among the lowest of any private utility in the Nation, and we know it is in the best interest of our ratepayers and our State's economies to keep those rates low. We support the passage of Senate bill 426. It is needed to clarify the act on the issue of preference on hydro relicensing. Its passage is required to provide equity and fairness to reasonably assure our customers that they can depend on an adequate supply of low-cost power. Thank you, Mr. Chairman.

[The prepared statement of Mr. Lanham follows:]

TESTIMONY OF
LOGAN LANHAM
SENIOR VICE PRESIDENT OF PUBLIC AFFAIRS
IDAHO POWER COMPANY
BEFORE THE UNITED STATES SENATE
COMMITTEE ON ENERGY AND NATURAL RESOURCES
SUBCOMMITTEE ON WATER AND POWER
JUNE 11, 1985

My name is Logan Lanham of Boise, Idaho. I am Senior Vice President of Public Affairs for the Idaho Power Company.

We appreciate the opportunity to present our position and views on hydro relicensing, which will require the amending of the Federal Power Act (the Act) to clarify that a preference for states and municipalities does not apply against the original or operating licensee in relicensing proceedings. We are appearing in support of S 426 which requires amendment of the Act to accomplish this result.

The Idaho Power Company is an independent, investor-owned utility, founded in 1916, and supplies electrical service to nearly 270,000 customers in a 20,000-square-mile area of southern Idaho, northern Nevada, and eastern Oregon.

Idaho Power Company's customers have been fortunate in the past as the Company has been able to rely heavily on low-cost hydroelectric generation to supply their energy needs. The Company is one of the nation's few utilities with primarily a hydro base, having more than seventy percent (70%) of its generation supplied by seventeen (17) generating plants in Idaho on the Snake River and its tributaries. A map indicating the location of these plants and their installed capacities is attached as Exhibit I. The Company's hydro plants, due to above average water, provided seventy-five percent (75%) of our actual generation in 1982, eighty-two percent (82%) in 1983, and seventy-seven percent (77%) in 1984. The remaining balance of our energy comes primarily from three coal-fired plants in which ownerships are shared. In addition, at times of high water, we sell surplus hydro energy to the other utilities, many of which burn high-cost gas and oil in southern California. Therefore, in addition to benefiting our customers, Idaho Power Company's hydroelectric system benefits other companies' customers as well. It is easy to see why the Company is deeply concerned and interested in the clarification of the Act. In order to continue this very beneficial supply of low-cost energy to our customers, the conclusion must be that states and municipalities are not guaranteed a preference in relicensing proceedings.

We are not here today to discuss philosophy or a philosophical position, but we are here requesting fairness and equity while representing our customers' and our Company's economic position and protecting each's investment in our licensed hydroelectric facilities. It is our opinion that the authors of the Federal Power Act did not intend that states and municipalities would ever have a preference in the relicensing of hydroelectric projects. If they had, they would have spelled out a preference in Section 15 as they did in Section 7 of the Act. In fact, we believe in Section 15 of the Act it was their intent not to grant municipal or state preferences against the original licensee in the relicensing procedure.

In the past few years, the Company has relicensed one hydroelectric project and we are in the process of relicensing another. To date, we have not had a state or municipality file a competing application, nor try to assert a preference in the relicensing of our projects. We believe this is due to the fact we have worked together with these bodies within our service area and have a good relationship with our municipal customers, as well as with other municipalities in our state. We hope this continues. In the past year, however, we have had municipalities from the Northwest, such as the cities of Seattle and Tacoma, who have acquired hydroelectric output within our service area and who have filed with the Federal Energy Regulatory Commission (FERC) on hydroelectric sites within the Company's service territory -- sites on which the Company had already completed engineering and environmental studies. These municipalities, among others, are attempting to purchase either hydro facilities or their generation in Idaho, generation which is within the framework of the Public Utilities Regulatory Policy Act. All this is happening at a time when a surplus of energy in the Pacific Northwest is projected to last well into the late 1990's.

Within the last two years, we have seen the FERC issue a license to a municipality, and at the same time reject a license application of an investor-owned utility. Within virtually the same timeframe of each other, the municipality was granted a license saying the need would be forthcoming in future years, while the private utility's application for license was dismissed on grounds that the private utility could not show a need. Both facilities are in the Northwest; both were proposed for the same timeframe; and they were not more than a hundred miles apart. It would appear that the FERC presently has different requirements for municipalities than it does for private utilities.

In 1967, the Federal Power Commission (now FERC) advised Congress that the state or municipal preference did not apply against the original licensee at the time of relicensing. The point is that FERC changes its position. In fact, FERC has changed its position on the preference in hydro relicensing three times. That is one reason why we are supporting S 426 to clarify the Federal Power Act once and for all on the preference in the hydro relicensing issue.

I am not stating, nor do we have the position, that hydro generation of the private utilities should be under a perpetual license. We believe that the existing licensee should have the right to relicense. The Committee knows there are terms and conditions imposed upon a utility seeking relicensing of hydroelectric projects. The federal interest has already been met by the facility having been previously licensed and constructed, as well as adding a reliable supply of energy to the area. Within three to five years prior to the expiration of the existing license, the licensee is required to report to the FERC its intent to file for a relicense. After that, the procedure for relicensing is very similar to the one used for the licensing of a new project. One condition should be: Has the utility shown good stewardship in the project. One question would be: Is it in the public interest to have the project relicensed? Proposed improvements at the project planned to be relicensed, such as upgrading, uprating, refurbishing, new generation, environmental improvements, fish and wildlife considerations, or any other investment the utility plans to assure that the generating facility continues to retain its generating capabilities, as well as its economic value, are included. If the utility does not comply with the regulations and fails to conduct a complete evaluation of the existing project -- a fresh look -- then a competing application may be justified. However, you will find that our Company's projects are truly operated and utilized in the public interest. We believe you will find other investor-owned facilities are also operated to the utmost efficiency and responsibility, all in the public interest. The Committee knows that the investor-owned utilities are highly regulated; their facilities have been paid for by their customers; and that it is the utilities' obligation to assure that their customers' investment, as well as their investors' future, are protected.

The Committee is undoubtedly aware that within the next seven to ten years, nearly 200 FERC original licenses held by private investor-owned utilities will expire. These projects are located in about half of the states of our nation and constitute approximately twenty-five percent (25%) of our nation's hydroelectric resources. Our Company has one license alone that when it expires, if it is not renewed to the Company, would deprive the Company and its customers of nearly seventy-five percent (75%) of its total hydroelectric generation. It is not necessary to tell you that this would be a disaster for our customers and our Company. If the hydro relicensing preference in the Federal Power Act is not clarified, you can rest assured that this project will have a competing application for license filed.

Another major issue that cannot be overlooked is just compensation for our customers for the project in the event that a license is lost by the existing licensee in the relicensing process. In situations where a license is expiring and up for renewal, the original licensee is supposed to receive compensation under the net investment and severance damage definition set out in Section 3(13) of the Act. However, if the federal government, a state, or a municipality uses the right of eminent domain, just compensation is to be paid under the terms of Section 14 of the Act. It is well known that after fifty years, a hydro facility has been virtually depreciated, and on the books it appears that little or none of the original investment remains. However, with quality maintenance and improvements, the facility generates nearly as much energy, or perhaps even more than it did when it was new and is probably good enough for another fifty or more years. Should not there be complete and just compensation paid to the existing licensee if the project is taken? This must include more than the amount set out in Section 3(13). Senate Bill 426 properly amends the Federal Power Act to read "just compensation in the amount that the Commission shall determine in accordance with due process of law."

When hydroelectric projects are taken over, the lost energy subsequently has to be replaced by another form of energy and the capacity from a facility whose capacity and generation are equal to the facility lost. Inevitably, the new generating facility costs substantially more per installed capacity, and its generation costs are substantially greater than the cost of the hydroelectric facility it replaces. This can necessitate astronomical rate increases to the existing customers who have to foot the bill. Is that fairness and equity? Is this in the public interest? I doubt it. Furthermore, why should a small segment of people served by a municipality or county gain a tremendous economic advantage over a majority of their neighbors who are served by a private utility? Is this in the public interest? Again, that is simply not fair. The loss of one of our Company's licensed projects would necessitate the construction of nearly three 500,000-kW thermal units at an untold and unnecessary added expenditure to our ratepayers and at rates far higher than those of today's. Our rates -- thanks to our hydro facilities -- are among the lowest of any private utility in the nation and we know it is in the best interests of our ratepayers and our state's economy to keep those rates low.

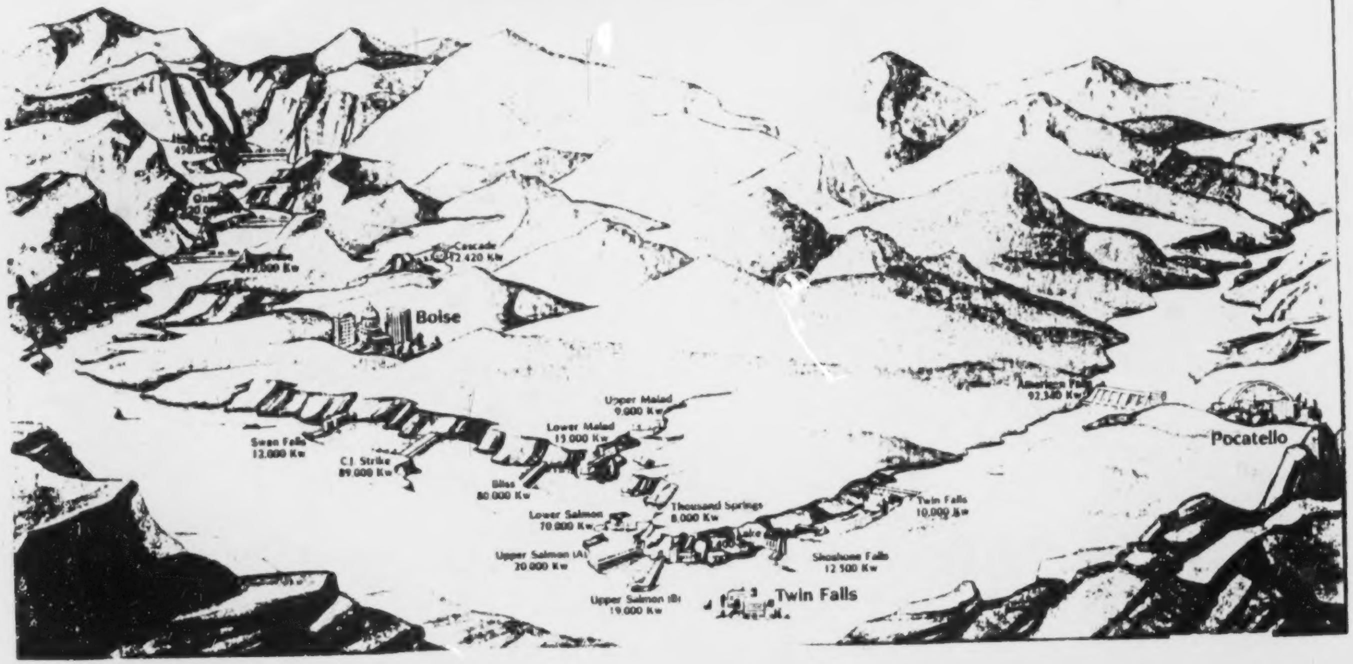
We support the passage of S 426 as it is needed to clarify the Act on the issue of preference on hydro relicensing and to establish a true measure of just compensation for the takeover of an existing project. Its passage is required to provide equity and fairness to reasonably assure our customers that they can depend on an adequate supply of low-cost reliable hydro power.

Thank you.

EXHIBIT I

THE SNAKE RIVER & IDAHO POWER'S HYDROELECTRIC SYSTEM.

Total Hydroelectric Capacity – 1,796,660 Kw (Kilowatts)


Cascade
12,420 Kw
Boise
Upper Malad
9,000 Kw
Lower Malad
15,000 Kw
Swan Falls
12,000 Kw
C.J. Strike
89,000 Kw
Bliss
80,000 Kw
Lower Salmon
70,000 Kw
Upper Salmon (A)
20,000 Kw
Upper Salmon (B)
19,000 Kw
Thousand Springs
8,000 Kw
Lake
Shoshone Falls
12,500 Kw
Twin Falls
10,000 Kw
Twin Falls
American Falls
92,340 Kw
Pocatello

Senator **Melcher** [presiding.] I believe the last member on this panel is Mr. Hov.

STATEMENT OF LOREN J. HOV, CORPORATE DIRECTOR OF ENERGY MANAGEMENT, STAUFFER CHEMICAL CO.

Mr. Hov. Thank you. I am Loren J. Hov, corporate director of energy management for Stauffer Chemical Co., a Fortune 500 manufacturer of chemicals. Stauffer is headquartered in Westport, CT, and operates plants or other facilities in over half the States of the Nation. I would like to summarize my more detailed written comments and ask that they become a part of the record. I would be pleased to answer questions on all my comments.

Senator **Melcher**. They will be made part of the record immediately following your statement, Mr. Hov.

Mr. Hov. Hydroelectric generation has for some years exeeded the power generated in the United States by oil, natural gas, or nuclear means. Most forecasts show it will continue to increase its importance versus oil and natural gas. We are concerned about the way this important resource is used.

I am here today to emphasize to the committee Stauffer's support for S. 426. Stauffer favors S. 426 as a logical policy to protect nearly all users of power. We are particularly pleased with the simple provisions of the bill.

One requires that tie breaking preference in hydro relicensing applications be given to the existing license holder. The other provides that the existing license holder receive just compensation if project changes licensees.

We feel the combination of provisions will lessen the opportunity for certain customers to obtain a "windfall" of low cost hyrdopower at the expense of other customers.

Thousands and tens of thousands of industrial organizations, through the National Association of Manufacturers, the Chemical Manufacturers Association, and the Electricity Consumers Resource Council, have shown their support for the provisions of H.R. 44 and S. 426. Stauffer is pleased to be an active member of these trade associations. I feel that the support by Elcon of S. 426 is particularly relevant.

Although composed of large electricity consuming industrial firms, Elcon members advocate the development and adoption of coordinated, consistent Federal, State, and local policies which will ensure an adequate, reliable, and sufficient electricity supply to all users at prices based on their costs incurred in serving customers.

In other words, Elcon is a group of consumers and wants fairness for consumers, large and small. The fact that Elcon supports this bill argues strongly in favor of its fairness to all customers.

Stauffer supports S. 426 as appropriate congressional policy to prevent certain municipalities from taking unwarranted advantage of poorly defined current law to benefit individual municipal customers of power at the cost of the majority of customers elsewhere. For example, simplifying—and it is a much more complex structure than I will say here—surrounding the licensing or relicensing of a specific PG&E project may illustrate our point.

This is of course the city of Santa Clara, CA, that's been discussed before and I understand Santa Clara will be here. They have petitioned for the license to the Mokelumne project 137. Currently power from that project benefits PG&E's 3½ million customers. If Santa Clara wins with municipal preference, the power will be useful to Santa Clara's 35,000 customers.

In our view, most likely those 35,000 will actually enjoy a profit, since the excess power will probably be sold by Santa Clara or otherwise manipulated. If Santa Clara sells the power for fuel displacement cost only each of its 35,000 customers will get all of their power paid for plus an additional $1,000 to $2,000 a year.

Stauffer does not believe Congress intended municipalities to get free power and also get wealthy from a power allocation which is paid for by a thousandfold others.

Stauffer fears that without congressional action the country may be faced with more than 100 regional economic and/or power supply disruptions and readjustments such as the Mokelumne license situation.

Cost disruptions such as this illustration make it difficult or impossible for industrials such as Stauffer to adequately or accurately determine long-term forecasts for costs and sales for a plant served by a utility with a license renewal pending.

Industry wants to locate or stay in regions where it can plan its future. Disruptions such as these can cause industrial planners to choose other sites or shift operations since they cannot accurately forecast an important cost consideration, their utility rate.

It seems to Stauffer that S. 426 solves a major relicensing problem. Its provisions are sufficient and necessary to establish that if a change of license is to be made, it will be made on the basis of consumers' best interest and fairness and equity for all users.

We are not against more specific directives to the FERC regarding applicable standards for conservation and fish protection, et cetera, if they have a cost benefit and will be on a case-by-case basis and will not unduly delay resolution of the preference issue.

I would like to add since it is in my written testimony additionally you have heard in a previous panel a rediscussion of why S. 426 is unnecessary, that without it the cost to consumers would be maybe a penny a day. I would like to put that in perspective. On the PG&E system alone, a penny a day would allow municipal to grab $10 million a year in the country. A penny a day is probably more on the order of a quarter of a billion dollars further analyzed.

The Mokelumne system and for fuel replacement only that would cost the customers of PG&E approximately $100 million.

Thank you very much.

[The prepared statement of Mr. Hov follows:]

Written Testimony of
Loren J. Hov
before the
Water and Power Subcommittee
# of the
Energy and Natural Resources Committee
# of the
Senate of the United States

June 11, 1985

I am Loren J. Hov, Corporate Director of Energy Management for Stauffer Chemical Company which is headquartered in Westport, Connecticut, and has plants or facilities in over half the states of the nation. We are a Fortune 500 manufacturer of chemicals.

We are pleased to note the cosponsorship of S426 by one of our Connecticut Senators.

Connecticut has approximately 1,222,000 investor owned utility customers and only 56,000 municipal utility customers for its three IOU hydro facilities. With an installed capacity of 85.9 mw these facilities produced nearly 300 million kilowatt hours in 1983.

Many industrial consumers and others have been unaware that for the past few years the electrical power generated in the United States by hydro has exceeded that of nuclear, oil or natural gas. Only in recent months has nuclear generation exceeded hydro as number two to coal generation. Some projections show hydro generation exceeding oil plus natural gas generation by the turn of the century.

Rather than go into too much detail on the history and arguments that you may have heard in depth on S426 and the other bills, I would like to merely summarize our postion on those and then talk more about how an industrial consumer looks at the issues raised here.

Stauffer Chemical Company supports the provisions of S426, namely that (1) preference in hydro relicensing applications that are deemed tied in the public interest would lie with the existing license holder and, (2) in the event a project changes ownership that the existing license holder receive just compensation.

I am a member of the Energy Committee of the National Association of Manufacturers and on the Committee's Steering Committe. NAM endorses S426.

I am a member of various subcommittees of the Energy Committee of the Chemical Manufacturers Association. CMA endorses S426.

I am a member of the Technical Committee of the Electricity Consumers Resource Council and Stauffer is a founding member of ELCON. ELCON endorses S426.

I feel that the support by ELCON of S426 is particularly relevant. Although composed of large electricity consuming industrials, ELCON members advocate the development and adoption of coordinated, consistent Federal, State and local policies which will ensure an adequate, reliable and efficient electricity supply to all users at prices based on the costs incurred in serving customers. In other words, ELCON is a group of consumers and wants fairness to consumers, large or small.

Stauffer believes that certain arguments made against S426 and HR44, the sister bill in the House, are inaccurate and inappropriate. Particularly we disagree with:

1. It will be a private takeover of public rights.
2. It will repudiate nearly a century of federal water policy.
3. It will drive publicly owned utilities out of competition.
4. It will threaten the land and water environment.
5. It will destroy the economy of consumers or of labor.
6. Many specific $ and % arguments such as without S426 the impact on PG&E would be less than a penny a day per residential customer.
7. etc.

We can elaborate on these points as this committee may wish, but in these written comments we would like to at least elaborate on two of these:

A. How can a tie breaking preference for an existing license holder drive out of competition a publicly owned utility?-if competition is in the best interests of all? It appears that the public owned utility wants the preference to itself alone so as to drive out competition from IOU's. The competition to offer a better plan for all consumers under S426 is open to either (if a dollar gift is not made to one).

B. An argument against S426 is that without it the existing consumers would be penalized less than a cent a day. Obviously this is of no consequence. Wrong! If true, which it isn't, the cent a day on the PG&E system would give a municipal takeover $10,000,000/year for its greed! I have examined the alternate cost of the Mokelumne River project only for PG&E and see about $100,000,000 added cost to its existing customers.

Frequently the industrial viewpoint does not coincide with that of utilities. In this case it is justified and this is the first time I recall that I have ever sided with PG&E on an issue.

As I understood Mr. Russell Shay, representing and testifying for the Sierra Club in last week's hearing of the Subcommittee on Energy Conservation and Power of the Committee on Energy and Commerce of the House of Representatives on this topic of Hydro Power Relicensing, answered the question that, if his environmental concerns of salmon and steelhead migration were met by a licensee, did it make any real difference if the hydro system were licenced by an IOU or a public utility, with, "the simple answer is no."

I also heard him say that "about 90% of the environmental problems are the responsibility of new small hydro projects." I read this to say that most of the environmental problems are not an issue of hydro relicensing.

Stauffer supports S426 as appropriate congressional policy to prevent certain municipalities from taking unwarranted advantage of poorly defined current law to benefit individual municipal customers of power at the expense of the majority of customers elsewhere. For example, simplifying the more complex facts surrounding the relicensing of a specific PG&E project may illustrate our point. The city of Santa Clara, California has petitioned for the license to the Mokelumne project 137. Currently, power from that project benefits PG&E's three and a half million customers. If Santa Clara wins with municipal preference, the power will be useful to Santa Clara's 35,000 customers. In our view, most likely those 35,000 will actually enjoy a profit, since the excess power will probably be sold by Santa Clara. If Santa Clara sells the power for fuel displacement cost only, each of its 35,000 customers would get all of their power paid for plus an additional $1-2,000/year. Stauffer does not believe Congress intended municipalities to get free power and also wealthy from an improper power allocation which is paid for by a thousand fold others.

The disruption to PG&E customers, including industrial firms, is obvious. Either they will have to buy back their own power, if Santa Clara hasn't sold it elsewhere, or buy from another source or build more capacity - all at increased cost and possible disruption of service.

Stauffer fears that without congressional action,the country may be faced with more than a hundred regional economical and/or power supply disruptions and readjustments such as the Mokelumne license situation. Cost disruptions such as this illustration make it difficult or impossible for industrial firms such as Stauffer to adequately or accurately determine a long term forecast for costs and sales for a plant served by a utility with a license renewal pending. Industry wants to locate or stay in regions where it can plan its future. Disruptions such as these can cause industrial planners to choose other sites or shift operations since they cannot accurately forecast an important cost consideration, their utility rate.

I believe it is the responsibility of the Congress to take the long strategic view and override the greed of the few in cases such as this. If these kinds of dislocations are allowed to take place in what would certainly be classified as in an abrupt manner, then significant economic disruption will occur. The economic equilibrium that exits will be seriously disturbed. Businesses will be adversely impacted and jobs will be lost. Relocations and wasteful reestablishment will be required.

Let me emphasize a key point - our system of savings and capital investment can be badly impacted by precipitous actions which can grossly impact business economics. A chemical company, such as the one I work for, invests money to build a plant. That act is a long term commitment to the community to provide jobs for people and profit for its shareholders. Business must have long term stability to survive and prosper.

It seems to us that S426 cuts to the heart of the problem - it's two active provisions are sufficient and necessary to establish that if a change of license is to be made it will be made on the basis of consumers best interests and fairness and equity for all users.

I believe that the FERC, with the directive of S426, will be able to correct the existing deficiencies. Modifications and constraints proposed in other bills may be unnecessary. Congress may believe the FERC should receive more specific directives and standards to be applied in considering relicensing applications in the areas of conservation and environmental considerations, including ingress and egress for fish populations. I can only applaud such directives, if reasonable and if cost/benefit analyses have been considered. After all, I am charged with energy/resource conservation by my company and I have spent nearly fifty years fishing many of this continent's rivers, streams and lakes including the Mokelumne.

I cannot say that such considerations are secondary to the issue of resolving the preference issue, but I will say that such considerations should not unduly delay a resolution of the preference issue. They probably should allow the FERC to consider the conservation and environmental issues on a case by case basis since controls on some hydro systems are already much more adequate than others on these issues.

Incidentally, we have read of additional proposals to have hydro power auctioned off to the highest bidder, and other not-adequately thought-out proposals. Such an auction approach would utterly destroy the principle of public preference, when S426 does not. Such an approach would also destroy the principle of cost-of-service pricing by utilities. This principle has been historically embedded in the country's electric rate making procedures.

Senator EVANS [presiding]. Thank you, gentlemen. I am sorry we have had disruptions of voting which seems to come regularly at this time of day. We will just have to put up with it. I do not know if any of you have yet had the opportunity to examine the bill I introduced, which was towards the end of last week.

If not, it would be helpful to examine that with particular reference to economic impact criteria and fish and wildlife language compensation formulas. If you would not mind doing that and submitting any of your comments or observations for the record, it will be open for 2 weeks. And that would be helpful, to receive that from you.

I would guess that from the general nature of all of your testimony, you like the idea of an existing licensee having, if not a total opportunity at least the odds-on chance of retaining the license in I suppose more the nature of consistency and dependability than anything else. Are there any benefits to be gained through competition at the point of relicensing, in your view?

We have a lot of things that go by open competition. The U.S. Forest Service bids for timber, or the companies bid for U.S. Forest Service timber, and presumably the public to the degree that that reduces an otherwise large tax burden benefits from that.

So what is wrong with competition when relicensing comes up on the use of a public resource? Anybody. Mr. Lanham?

Mr. LANHAM. Senator, many years ago, you know that the private utilities were heavily regulated. There used to be virtually hundreds of power companies throughout the system, throughout the country, and the competition at that time was substituted for regulation. So now we're highly regulated.

When you go in to apply for a relicense, you are virtually under the same position as you were when you started out to license the project originally. The goals in 1920 when the Federal Power Act—and the conditions are not the same as they are today—but even though, and we have relicensed projects, the relicensing and the licensing are virtually the same thing. When you are talking about competition, you're equating competition with regulation. We don't feel that unless a utility has not been a good steward, unless they have not maintained their properties in a first class condition, then maybe you want to talk about competition. But other than that, I don't think it's justified.

Senator EVANS. I'm not sure I'd really call that competition. I think it would be probably throwing out a bad apple along with the rest of it. If somebody cannot meet the minimum standards, should they even be allowed in the game, or to continue in the game, or allow the other—you know, potentially there might be two or three other applicants, and if you decide under a bill like 426 that the existing licenseholder hasn't met the minimum standards, should they be eliminated from that point on?

Mr. HOV. As a customer, I would like to say yes.

Senator EVANS. Anybody else?

Mr. LANHAM. Our customers would agree with that.

Senator EVANS. Senator Melcher.

Senator MELCHER. Thank you, Mr. Chairman. I suspect that because all witnesses are asked to testify on bills before the committee, that we sometimes ignore the likely outcome of the committee's actions. And that is, to start drafting the committee bill. I don't know what will be the will of the committee in this instance, but I would suspect that it would not be too unlikely. But if that is the likely process, I would like to ask all of you the same question I asked before. It seemed to pick up parts of your testimony and each one of you alluded to this, or are in some cases very explicit.

Mr. Hov, for instance, speaking for Stauffer you are very much in—you are very strong in the position that any type of disruption that would cost a Stauffer plant or create uncertainty for a Stauffer plant or would cost a great deal more might result in, what, loss of jobs, loss of activity in the area regarding the plant?

Mr. Hov. Loss of jobs, loss of plants, because of a lot of factors, not necessarily the cost of electricity, which is so high in California. Stauffer in the last decade has closed down 7 of their 12 plants. The good part of the story is, we still have five.

Senator **Melcher**. Mr. O'Reilly, is your testimony to the same effect? Or does it vary somewhat in that you have employees working for utility firms?

Mr. **O'Reilly**. That is correct, Senator.

Senator **Melcher**. What's correct?

Mr. **O'Reilly**. We represent employees of both public and private utilities as well as looking upon them as consumers. We have many people in manufacturing, construction, and so on who would be neutral to the question, but are consumers of electricity. And our concern, as I indicated, is that once a license is up for renewal after 50 years, that if that present licensee, whether it be a municipal or an investor-owned, if they have lived up to the premise of the act and have been a good citizen, they should be allowed relicensing. And their consumers should not lose that low-cost hydropower.

Senator **Melcher**. Mr. Shade, in speaking for paper manufacturers and the national forest producers, are you saying that—I guess your testimony is split, because some of the companies actually would be the licensees. Is that correct?

Mr. **Shade**. That is correct, sir.

Senator **Melcher**. Then do I understand your testimony properly to speak for them, and also in the case where a company is not a licensee?

Mr. **Shade**. Our testimony this afternoon, Senator, was focused on the industry companies who are current licenseholders and who will be subject to relicensing at a later date, and the economic impact of the loss of those licenses on their facilities. This is what our testimony is directed at this afternoon.

As a company, Boise Cascade, for example, is a customer of both public utilities, investor-owned utilities, and we also self generate from hydro sources some of our own power. So we are subject to the entire gamut of the effect of electricity and electricity costs.

I may add, however, that a recent survey we made, I think in some detail by API (American Paper Institute) staff, was that we could not make the statement before you today that the loss of a license at a particular site would cause such economic trauma at that site to cause that facilty to close, but certainly from one example that we have cited in our testimony an increase if $15 million on an annual $40 million energy bill certainly would be a disincentive, I do believe, at that site to expand production at a later date.

Senator **Melcher**. If I understand you correctly, you are saying hold down the rates?

Mr. **Lanham**. [Nods affirmatively.]

Mr. **Shade**. We are saying in our testimony that at the relicensing stage that we should be allowed to compete fairly for the relicensing of that.

Senator **Melcher**. That is if the company owns it.

Mr. **Shade**. That is correct.

Senator **Melcher** Then let me take the next step. Are you saying hold down the rates otherwise, and that that is key, or what?

Mr. **Shade**. We are certainly in favor of fair and equal utility rates, but we are not addressing utility rates per se in this testimony today.

Senator **Melcher**. You are not getting into that?

Mr. **Shade**. No, sir.

Senator **Melcher**. You are not inferring that if a site is relicensed to somebody else, that that would or would not increase the rates?

Mr. **Shade**. If a license that we currently hold would pass to another utility, that would certainly increase the electricity costs of the former licenseholders.

Senator **Melcher**. And if a plant did not have any site where they're generating power but bought their power, what are you saying?

Mr. **Shade**. I am sorry, I did not understand your question, sir.

Senator **Melcher**. If the plant, paper or other, were not a licensee but were just buying power from some utility or municipality that owned the power, what are you saying then? Or a municipality that had the license. What are you saying then? Or are you addressing that? I thought you were.

Mr. **Shade**. I don't believe so, sir. As I understand your question, no, we're not objecting to that.

Senator **Melcher**. All right. Mr. Lanham, how do you answer the question? I guess I know. I have read your testimony or heard the tail end of it. You're saying that——

Mr. **Lanham**. Senator, as I mentioned before, we have one project. If it's not relicensed to us—it amounts to 75 percent of our hydrogeneration. We built that facility at a cost of about $200 a kw of installed capacity. Its O&M today is about 5 mils per kilowatt hour.

Now if I have to replace that with a thermal plant, I am talking about $2,000 a kw installed capacity and an O&M with fuel costs of about 55 to 60 mils, which is the difference between a 0.5 cent and 6 cents per kilowatt hour. That is a drastic increase to our customers, both residential and industrial.

Senator **Melcher**. Well if I determine right, then it is fair to say that all of you have a stake in the relicensing procedures in terms of not disrupting the cost of the power to industrial users for fear of losing jobs. Now, Mr. Lanham, I am taking you a little further. Well, I don't think I am. I think your testimony alludes to that, too. Is that fair, or not? Because I think this is going to have to be one of the guiding principles of whatever comes out of here. Is that a fair statement?

Mr. LANHAM. That I just made?

Senator MELCHER. No, that I just made. My turn. [Laughter.]

That one of the guiding principles in drafting the bill here, that is what I am going to assume is going to happen—we may start out with a number, but I think it is going to be a redraft—one of the guiding principles will have to be: Will we set the guidelines and the procedures in the relicensing process to where we can assure the stability of the area in terms of cost of power in relationship to jobs?

Mr. LANHAM. As long as it is fair and equitable to the people who actually paid for the facilities, and that is the customer of the utility that has the license. If it is fair and equitable to that customer, then you have met the goal in your relicensing legislation.

Senator MELCHER. I think I must have stated your view, Mr. Hov, specifically, have I not?

Mr. HOV. I believe in great part you have.

Senator MELCHER. Pardon me?

Mr. HOV. I believe in great part you have spoken my view. I would be willing to expand on it.

Senator MELCHER. No. [Laughter.]

Mr. Shade.

Mr. SHADE. I'll support your statement, sir.

Senator MELCHER. All right. And, Mr. O'Reilly?

Mr. O'REILLY. I would also.

Senator MELCHER. Thank you very much.

Senator EVANS. Thank you, gentlemen.

[Subsequent to the hearing the American Paper Institute and the National Forest Products Association submitted the following:]

RESPONSE TO REQUEST OF SENATOR EVANS FOR COMMENTS ON S.1260

The American Paper Institute and the National Forest Products Association appreciate this opportunity to supplement their testimony on hydropower relicensing with their views on S.1260. After carefully reviewing S.1260, however, we must reiterate our support for Senator Wallop's bill, S.426. API and NFPA recognize that the public interest criteria advanced in S.1260 would be helpful in many relicensing competitions, but these critera seem to be directed to instances when the competitors are utilities; these criteria do not seem to address licenses presently held by non-utility industrial licenseholders. We would suggest language be added so that Sec 5 (c) (3) (A) would read as follows:

> (A) the economic impact upon customers served by the existing licensee, or, in the case the case of a non-utility licenseholder, the economic impact on the operation and efficienty of the industrial facility, its employees, and the surrounding community, if it fails to receive a new license.

We respectfully disagree with the proposal to reduce license terms to 30 years. Based on our industry's long involvement with hydropower, we recognize the importance of continuing to upgrade hydroelectric facilities. A shorter license term, however, discourages such upgrading because beyond the mid-point of the license term, the payback period is often too short to justify such investment. Indeed, the inclusion in S.1260 of a "municipal preference" at relicensing increases the fear that a license might be lost. The combination of a municipal preference at relicensing with a shorter license term works to keep non-public hydroelectric facilities from taking advantage of technological advances. The forest products industry would rather see longer license terms to encourage maximum efficiency in the operation of hydroelectric facilities.

Turning to the issue of compensation, S.1260 has a novel method of reimbursing the previous licensee for the loss of its property. Requiring the new licensee to share in the existing licensee's loss, however, is an exceedingly difficult calculation to craft legislatively. In S.1260, for example, it is not clear whether such payments by the new license would be for new capacity, should it be justified, or just the energy cost of providing the equivalent amount of electricity. In addition, it is not clear how some of the compensation requirements, such as the pass-through of such payment to customers of the existing licensee and the assumption of all existing contracts, would apply to non-utility licenseholders.

In conclusion, we in the forest products industry would urge that legislation on the issue of hydroelectric relicensing recognize the industrial licenseholder. We ask that those who have utilized hydroelectric power consistent with the public interest in the past be allowed to continue to do so, unless another party can demonstrate that it has a superior application.

June 25, 1985

Senator EVANS. The next panel will be panel No. 4, Mr. Angelo Pizzagalli, president of Pizzagalli Construction Co. from South Burlington, VT, accompanied by Ms. Susan Connolly, manager, energy and natural resources, U.S. Chamber of Commerce; Mr. Frank Augsbury, president, Adirondack North Country Association; Mr. Dan Smith, associate director, Association of California Water Agencies; and Ms. K.C. Shpall of the Mountain States Legal Foundation.

If you are ready to proceed, we will, at the beginning, have all of your complete submitted testimony in the record, and would ask that you summarize it in as concise a manner as possible consistent with clarity, would you like to begin?

Mr. PIZZAGALLI. Good afternoon. Excuse me. I think——

Senator EVANS. Does the panel have some order of events?

STATEMENT OF K.C. SHPALL, MOUNTAIN STATES LEGAL FOUNDATION

Ms. SHPALL. It is just that I have to catch a plane and I was wondering if you would mind if I went first?

Senator EVANS. Fine. Yes, indeed, we'll have you go first, Ms. Shpall.

Ms. SHPALL. Mountain States Legal Foundation thanks the committee for the opportunity to present its views regarding pending legislation to clarify the Federal Power Act with regard to State and municipal preference.

Mountain States Legal Foundation is a nonprofit membership public interest law firm dedicated to bringing before the courts and on rare occasions Congress those issues vital to the defense and preservation of individual liberties, private property rights, and the freedom of enterprise.

The foundation seeks to protect the interests of its members and those of the public from overly intrusive, unnecessary, and costly Government regulations. The question of whether a municipal preference should operate to oust an original licensee at the expiration of the license term is of great import to the Nation and most certainly the Western United States.

Hydroelectric power accounts for a significant percentage of the production of electricity, and its relative low cost and diminished environmental impacts make it even more attractive today than it was in 1920. In these times of diminished Federal revenues to State and local government programs, hydroelectric projects are attractive takeover prospects for local governments.

A hydroproject's recaptured value established in section 14 of the act provides the new licensee is to pay the net investment and any surface damage. Net investment being the cost of construction minus depreciation.

As a result, after 50 years of operation, state or municipal preference on relicensing allows local government to acquire a project for a very small sum and operate it at almost a guaranteed source of revenue. An interpretation of the FPA that allows State and municipal preferences to oust the original licensee deprives the private owned utility and shareholders of their investment backed expectations in future operations of the project.

Mountain States Legal Foundation believes that Congress never intended to establish a hydroelectric licensing structure that would virtually assure the original licensee's ouster to a competing public entity when the license expired.

The relicensing litigation that has occurred over the last 6 years shows that it may be many more years before the Supreme Court issues a definitive legal ruling that will govern the relicensing proceedings. Litigation is not only costly, but essentially non-productive.

Consequently, it is very much in the public interest for Congress to amend the FPA to specifically provide that State and municipal preferences do not operate against the original licensee.

The legislative history of the FPA reveals that State and municipal entities do not have a clear statutory preference in a contested relicensing proceeding against the original licensee. Mountain States Legal Foundation believes Congress did not intend to turn over the hydroelectric projects to State and municipal goverments after expiration of the initial license.

Consequently Senate bill 426 and 403 clarify any ambiguities regarding municipal preference in relicensing. Further, the FPA statutory objective of ensuring the Nation's water resources are used in the public interest.

Thank you very much.

Senator EVANS. Thank you. Since your time is short, we will get to a few questions before you have to leave, and then we will go on to the rest of the panel. I do not know if you were here this morning for some of the earlier questioning, but fundamentally do you believe that someone who received a license to use the water for a river for 50 years has bought anything more with that license, or should have received anything more with that license than the opoortunity to use that water for 50 years?

Ms. SHPALL. In a certain sense, they did, because of capital investment and because of all the effort put in to produce the hydropower, they have some investment-backed expectations, and I think the consumers also have some expectations regarding how much they are going to be paying through the rates. If the hydro project was built with their money and over the years because it has been depreciated is affording them the opportunity to pay lower costs, and a municipality can come in and take over that plant and serve other customers with it, I think not only investment-baced expectations but consumer expectations are thwarted.

Senator EVANS. How can there be any investment-backed expectations if, as you just said, they have depreciated the plant? Haven't they received back all of their investment?

Ms. SHPALL. They have received back all their investment, but if the plant is still continuing to operate, there are still some additional expectations with regard to that.

Senator EVANS. But they knew they only had 50 years to start with.

Ms. SHPALL. That's true, but I think the old adage that a bird in the hand is worth two in the bush goes along with this kind of thing. If you have got the license you do have, I think, some basic expectation that you will be able to continue to operate as long as you comply with the act and have a good operating plan and are fulfilling the other goals of the FPA.

Senator EVANS. If someone owns some land and offered someone else a chance to build a building on it and gave them a ground lease for a certain period of time, do you think that they then have a right to renewal beyond the period of the lease?

Ms. SHPALL. Not necessarily, no, but they do have the right to compensation for whatever they have built if it is not renewed, or at least allow it to sever whatever they have built and remove it from the property.

Senator EVANS. It seems to me to be a quite common practice in those circumstances to—you get a lease for 50 years, 99 years, whatever length of time it is, and it is up to you to depreciate and get your investment out within that period of time.

Ms. SHPALL. But it wasn't clear under the act that they would absolutely have no opportunity to continue their lease. It appears from the act that in the legislative history that Congress was planning to reevaluate in 50 years how the program was running, and if it was running well, there was really no reason to take it away from the original operator.

Senator EVANS. Can you show me where that is in the original act or the current act?

Ms. SHPALL. No, it is not in the current act. It was just in some of the comments that were made during its debate on the Floor.

Senator EVANS. Well, of course, the debate on the floor takes anybody can say anything they want to on the floor, but the courts don't look behind the act if the act is clear. Is there any place where you think the act is unclear as it currently sits in that respect?

Mr. SHPALL. No, I think, and Mountain States Legal Foundation's position is that the act is clear that new licensees in section 15 refers to new licensees other than the original licensee, and we think the way the act reads now that clearly there is no municipal preference against an original licensee in relicensing. I mean, as far as we are concerned, several of the amendments only clarify what we believe to be the existing law.

Senator EVANS. If you so strongly believe that is existing law, why do you seek new legislation? We're always better off if we don't try and fuss around with new things if it ain't broke.

[Laughter.]

Ms. SHPALL. Well, because like we said, litigation is costly, time consuming, and often unproductive, and this appears to be the best use of public funds in order to clarify an ambiguity in the statute.

Senator EVANS. I see the Chairman has returned. We have just gotten through Ms. Shpall, who has to leave.

Senator MURKOWSKI [presiding]. Thank you, Senator.

The next witness is Mr. Smith.

Mr. SMITH. Thank you, Mr. Chairman.

Senator MURKOWSKI. You may be excused. We appreciate your efforts to bear with us through this part of it. Please proceed, Mr. Smith. Mr. Dan Smith, associate director of the Association of California Water Agencies, Sacramento.

STATEMENT OF DAN SMITH, ASSOCIATE DIRECTOR, ASSOCIATION OF CALIFORNIA WATER AGENCIES

Mr. SMITH. Thank you, Mr. Chairman. I will briefly summarize my written statement.

Our association is comprised of about 300 public water agencies in the State of California. These agencies are responsible for delivering about 85 percent of the water distributed in California for agricultural, domestic, and industrial purposes. Many of these agencies are large power users. About 95 percent of our members and their residence and landowners are consumers of power provided by investor-owned utilities. And that is a major factor that places us in support of the Electric Consumers Protection Act.

In our analysis the issue is not one of public versus private power. The real question is whether systems developed over the decades and paid for by existing users, who happen to be the majority of users, should be taken from the utilities that developed them and transferred to other utilities that will serve a relatively small number of users.

In California, as you have heard several times before today, the majority of energy users, including most of the energy users who are the public agencies comprising our association, are served by investor-owned utilities. To permit publicly owned utilities to have preference is not only unfair to the present licensees, but also potentially will result in a greater burden in the way of higher energy costs for millions and millions of consumers in California, including most of the public water agencies we represent.

In the case of those water agencies, they would have no choice but to pass on their higher energy costs to their consumers who are most of the people, businesses, and farms in California.

This domino effect will intensify the unfair economic impact of the municipal preference situation on the people of California.

Thus our association strongly supports Senate bill 426 and the concept that an existing licensee should receive a new license for its hydroelectric project unless it is shown that such relicensing is not in the public interest. Thank you very much.

[The prepared statement of Mr. Smith follows:]

Statement of the Association
# of California Water Agencies
Before the
Subcommittee on Water and Power
# of the
Committee on Energy and Natural Resources
United States Senate

Relicensing of Hydroelectric Projects
June 11, 1985

Mr. Chairman and Members of the Subcommittee. I am Dan Smith, Associate Director of the Association of California Water Agencies (ACWA), with offices in Sacramento, California.

The Association is comprised of about 300 public water agencies in California. Those members include agencies responsible for providing water to California's major cities and rural communities, to its massive industries and small businesses of all types, to large farm operations and small family farmers that together comprise some of the most productive agricultural areas the world has ever seen. Some of our members are very large, responsible for getting water to millions of people or many thousands of acres of farm land. Some are small, supplying domestic water to tiny communities or a handful of farmers. But, taken all together, our members are responsible for delivering about 85 percent of the state's fresh water to landowners and customers for domestic, industrial and agricultural purposes. About 75 percent of the state's population of more than 25 million people is located within the boundaries of our member agencies.

Energy is extremely important to the delivery of water, and the consumption of energy in California for that purpose is understandably large and constitutes a major cost item for water for just about every Californian. Thus, the members of the Association are deeply concerned with factors that impact on their cost for energy because it will impact on their service to their constituents and on the price they must charge for the water they serve. In particular, we are concerned about the relicensing of hydroelectric projects.

At the same time, we should note that the Association's membership also includes some public agencies that are engaged in the production and distribution of electrical energy. These include the Modesto, Turlock and Imperial Irrigation Districts, the Sacramento Municipal Utility District and the Los Angeles Department of Water and Power. As a matter of interest, three of the Association's members--the Sacramento Municipal Utility District, the Tuolumne Regional Water District and the June Lake Public Utility District--have filed competitive relicensing applications to take over existing projects of Pacific Gas and Electric Company and Southern California Edison Company.

Our Board of Directors has given a great deal of consideration to the issues for our membership involved in hydroelectric relicensing, and, as a result, has adopted policy in support of the concepts embodied in S. 426--please see Association Resolution 84-3 attached. Modification of the municipal preference clause of the Federal Power Act--to enable an existing licensee to receive a new license for its hydroelectric projects unless the relicensing is not in the public interest--is in the best interest of the members of our Association and, we firmly believe, in the best interest of the people of California and the entire nation.

To elaborate on that point, the Association has estimated that regulated utility companies are the source of electric power for member agencies' facilities and the landowners and residents of 95 percent of the Association's members. Additionally, about 30 of our members have a source of federally generated power that the private utility companies now carry over their transmission and distribution facilities for use by those members.

It is our understanding that the California Public Utilities Commission--in testimony last year before the House Subcommittee on Energy Conservation and Power--said that if the various hydroelectric projects owned by Pacific Gas and Electric Company and Southern California Edison Company were ordered transferred as existing licenses expire because of the preference issue, the additional cost to the rate payers of PG&E and SCE would exceed

$2 billion by 2005.

That is an unreasonable burden to add to the consumer, and yet it does not include the impact of the higher energy costs for most citizens on the other commodities and products on which they depend. Water is one of those commodities. If the cost of pumping and delivering water is increased by means of higher energy costs resulting from the preference situation, our member agencies would have no choice but to pass on those costs to the ultimate water users in the form of higher water rates. These costs would represent additional financial burdens heaped on all for the sake of the few who might benefit from the application of a municipal preference.

The Association feels that it is fundamentally unfair and unreasonable that low cost energy generated from licensed hydroelectric projects built by regulated utility companies and now serving the best interest of a large majority of the area's citizens should be subject to forced turnovers to municipal power systems which benefit far fewer customers.

In relicensing of hydroelectric power plants, as in most other matters, it would seem logical to seek the greatest good for the greatest number. By this standard, it makes sense to the members of our Association that the public utilities who serve more than 95 percent of our members should be permitted to keep operating the plants they constructed and developed instead of turning them over to municipal utilities that would serve considerably fewer consumers of electrical energy in California.

The Electric Consumers' Protection Act would, if enacted, provide protection for the nation's consumers by providing for fairness in relicensing of hydroelectric projects so that the applicant "best adapted" for a project would prevail. S. 426 would establish clearly that government-owned utilities are not to enjoy preferred status in relicensing proceedings. That is why the Association's Board of Directors, on February 9, 1984, adopted the attached Resolution 84-3, which I referred to earlier. The resolution, in essence, "supports modification of the municipal preference clause of the Federal Power Act to provide that any existing licensee shall receive a new license for its hydroelectric projects unless it is shown that the relicensing of the project would not be in the public interest."

The Association strongly supports this legislation and urges this Committee to endorse S. 426.

Resolution 84-3

ASSOCIATION OF CALIFORNIA WATER AGENCIES
BOARD OF DIRECTORS RESOLUTION
IN SUPPORT OF RELICENSING OF HYDROELECTRIC PROJECTS

WHEREAS, the owners and operators of existing hydroelectric projects have utilized and developed the nation's natural resources in order to generate low-cost electric energy for millions of Americans; and

WHEREAS, substantial numbers of water users, including those served by members of the Association of California Water Agencies, rely on that electricity to provide vital water supplies as well as wastewater treatment facilities; and

WHEREAS, certain hydroeelectric facilities are subject to relicensing by the Federal Energy Regulatory Commission; and

WHEREAS, The Federal Power Act provides for a municipal preference and some municipal utilities are endeavoring to secure the ownership and operation of existing privately owned generating facilities; and

WHEREAS, this would result in the transfer of the benefits provided by these existing facilities to a smaller service area and thus divert low cost power away from many of the agencies and water users represented by the Association of California Water Agencies; and

WHEREAS, such a transfer would result in increased power costs to those water suppliers and their customes currently receiving the benefit of existing hydroelectric facilities; now, therefore, be it

RESOLVED by the Board of Directors of the Association of California Water Agenices that the Association supports modification of the municipal preference clause of the Federal

Power Act to provide that any existing licensee shall receive a new license for its hydroelectric projects unless it is shown that the relicensing of the project would not be in the public interest.

I certify that this is a true copy of Resolution No. 84-3 as passed by the Board of Directors of the Association of California Water Agencies at its meeting in Sacramento, California on February 9, 1984.

John P. Fraser
John P. Fraser
Executive Director/General Counsel

February 9, 1984
Date

Senator MURKOWSKI. Thank you very much, Mr. Smith.

Our next witness is Mr. Augsbury. Mr. Augsbury is president of Adirondack North Country Association, Ogdensburg, NY. We welcome you before the committee, sir.

STATEMENT OF FRANK A. AUGSBURY, JR., PRESIDENT, ADIRONDACK NORTH COUNTRY ASSOCIATION

Mr. AUGSBURY. Thank you, Mr. Chairman. I would like to summarize my statement also. ANCA is a voluntary membership association which was established 30 years ago as the Adirondack Association and expanded in March of 1983 to serve the 14-county Adirondack north country region of New York State.

The territory in which we operate is principally conducted are those counties wholly or partially within or contiguous to the Adirondack Park, which comprises a section of New York State known as the north country.

The voluntary leadership of many hundreds come from all walks of life, business, agriculture, forestry, education, health, energy, transportation, tourism, and travel, and many other facilities. Our association comprises one-third of New York State geography and has approximately 1,100,000 people in it.

The purposes of ANCA are: To promote unity in the interests of the people in the Adirondack north country region; to maintain and enhance the quality of life in the region; to strengthen the economy of the ANCA region: and propose legislation before this subcommittee dealing with the relicensing of hydroelectric facilities that can have a profound impact on the overall present and future economic vitality of the 14 counties in the ANCA region. Within the ANCA region there are two investor-owned utilities in New York State serving over 2 million customers. They have for many years developed, owned, and operated hydroelectric projects which are licensed by the Federal Energy Regulatory Commission.

Niagara Mohawk Power Corp. has approximately 12 projects and 320 megawatts of capacity which will be up for relicensing between the present and the end of 1993; and the Niagara Mohawk, and New York State Electric & Gas Corp. have many, many other hydroelectric projects whose licenses expire thereafter. ANCA does not believe that the public interest will be served by an existing licensee's loss of these low-cost hydrogenerating facilities since such a development would occasion higher energy costs to consumers.

ANCA would urge the subcommittee to recognize another group of hydropower licensee holders, namely, the forest products industry and other industrial hydro site operators with unique circumstances will also be affected by what the subcommittee does.

Indeed, the 14-county ANCA area is interspersed not only by hydro projects developed by Niagara Mohawk, and New York State Electric & Gas, but also with hydroelectric projects developed and used by the forest products industry. Many of our forest products mills have historically used water power in the operation of their manufacturing processes.

The economies of the communities, particularly those isolated communities in which many of our mills using hydropower are located, are highly dependent on the economic viability of the mill. In these circumstances, it goes without saying that the local community shall, that is, it may or would, suffer severe economic distress.

For millions of New York electricity consumers who benefit from hydroelectric facilities, presently licensed Niagara Mohawk and New York State Electric & Gas including the forest products industry, would incur higher electric rates if these utilities were forced to transfer the projects to another licensee.

Property taxes' revenue might be significantly adversely impacted as might be the jobs of the employees who operate and maintain these facilities or the jobs of the people in the forest product plants which rely on hydroelectric generation to keep their plants' products competitive in the marketplace.

In short, the economic base which ANCA has been striving diligently to reinforce and build on behalf of our 1,100,000 people is in danger of being eroded. In short, we feel in ANCA that these two companies have done an outstanding job in developing our region.

Our job is to develop the underdeveloped empire of the Empire State. We are a group of volunteers who've gathered together, who are all in the private sector, who believe that the private sector can do a better job since they are taxpaying enterprises in a capitalistic system, and we strongly support on behalf of the 1,100,000 people of our region of ANCA, we urge the Senate consideration and passage of S. 426, the Electric Consumers Protection Act of 1985.

Thank you, Senator.

[The prepared statement of Mr. Augsbury follows:]

STATEMENT OF

FRANK A. AUGSBURY, JR.

PRESIDENT

ADIRONDACK NORTH COUNTRY ASSOCIATION

Before the

SUBCOMMITTEE ON WATER AND POWER

of the

SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES

June 11, 1985

Mr. Chairman and members of the Subcommittee, my name is Frank A. Augsbury, Jr. I am the President of the Adirondack North Country Association (ANCA), having been elected to that position in 1984. ANCA is a voluntary membership association which was established 30 years ago as the Adirondack Association, and expanded in March, 1983 to serve the 14-county Adirondack North Country region of New York State as ANCA. The territory in which ANCA's operations are principally conducted are those counties wholly or partially within or contiguous to the Adirondack Park and which comprise the section of New York State known as the North Country. The counties are Clinton, Essex, Franklin, Fulton, Hamilton, Herkimer, Jefferson, Lewis, Oneida, Oswego, St. Lawrence, Saratoga, Warren and Washington. ANCA meets monthly to review social and economic priorities and issues related to the economic well being of the 1,100,000 residents of the region.

ANCA's concern has been economic development that will create jobs, build pride in our region among our people and retain our way of life. 1985 marks the 31st year of ANCA service to the 14-county Adirondack North Country region and to the State of New York. Our volunteer leadership of many hundreds come from all walks of life: business, agriculture, forestry, education, health, energy, transportation, tourism and travel, recreation, cultural affairs, politics, government, and manufacturing. We represent a growing population in excess of 1,100,000 people from scores of communities, cities, towns, villages and hamlets in upstate New York stretching from the Mohawk Valley to Lake Ontario and from the St. Lawrence Valley to the Champlain Valley, New England and Canada -- over one-third of New York State's geography.

Within our bounds we have splendid natural resources: forests, rivers, lakes, minerals, fisheries, hunting grounds and ecologically unique properties in public and private ownership. Our citizens are recognized for their high work ethic and their reverance for the land and their environs. In addition, we have some 10,472 farms with annual production of some $433,000,000.00. Our 1,293 manufacturing plants employ 85,511 who produce products in excess of $6 billion annually. The Adirondack State Park, the largest park in the 48 contiguous states, is within our bounds. Over 1,300,000 campers utilize its year-round resources and facilities, while an additional 1,434,000 campers annually use campsites outside this Park, but within ANCA bounds - bringing hundreds of millions of dollars of revenue to private and State facilities. Our 14-county Adirondack North Country area is a land of opportunity within one-half day's drive to a market of more than 50,000,000 people which sports clean air, fresh water, vast recreational opportunities and scenic wonders which beckon citizens of all ages.

The purposes of ANCA are:

A. To promote unity in the interests of the people resident in, and interested in, the Adirondack North Country region.

B. To foster and protect, and to publicize, the recreational, commercial, industrial and civic interests beneficial to the quality of life in the Adirondack North Country region.

C. Consistent with the needs and interests of the people of the Adirondack North Country region, to maintain and enhance the quality of life throughout the region, and to preserve and promote that advancement through:

- Dissemination of accurate information on recreation.
- Encouragement and support of planned economic development.
- Proposing and responding to legislation at all levels of government.
- Stimulating interest and promote wise use of the Adirondack North Country region.
- Identification and support of educational and historical programs relevant to the Adirondack North Country region.
- Supporting the balanced and wise use of the natural resources in the Adirondack North Country region while protecting the environment and ecology.

D. By these acts, to strengthen the economy of the Adirondack North Country region.

One measure of the seriousness and fervor with which ANCA views its charter can be gleaned from ANCA's September, 1984 Declaration of Inter-Dependence, attached hereto as Attachment 1. That Declaration of Inter-Dependence represents a profound statement on behalf of the 1,100,000 people from the Adirondack North Country. ANCA and the people of the 14-county Adirondack North Country region have a pact. These people, having expressed their goals and aspirations, have joined in a partnership with ANCA to achieve their goals and aspirations.

In light of ANCA's charter, and the self-betterment partnership entered into between ANCA and the people of the Adirondack North Country region, over the last year ANCA has targeted its efforts on creating jobs, 14,000 jobs to be specific. Creating these jobs, and the economic benefit they will bring to the region, requires action on several fronts. Creating jobs that will have the most benefit to the region while maintaining our way of life requires a variety of actions. ANCA has identified these actions in an 8-point program, set forth in Attachment 2. The program, built upon the natural attributes and strengths of the region, addresses a wide spectrum of the economy of the region, i.e. agriculture, tourism, small business and crafts, forestry, energy, transportation, education and museums, health and human services.

The proposed legislation before this Subcommittee dealing with the relicensing of hydroelectric facilities can have a profound impact on the very same wide spectrum of the economy that ANCA's 8-point program initiative has recently addressed as well as the overall present and future economic vitality of the 14-county Adirondack North Country region. Since this magnificent and expansive area of New York State contains the divide between the watersheds of the Hudson, Mohawk and St. Lawrence Rivers, it is an area rich in both hydroelectric projects and hydroelectric tradition. In particular, within the Adirondack North Country region, two investor-owned electric utilities in New York State, serving over 2,000,000 customers, have for many years, developed, owned and operated hydroelectric projects which are licensed by the Federal Energy Regulatory Commission (FERC). These low cost hydroelectric projects are vitally important to electric consumers in New York State in general and in the franchise territories of Niagara Mohawk Power Corporation and New York State Electric and Gas Corporation in particular.

In the Adirondack North Country region, Niagara Mohawk Power Corporation has approximately twelve projects and 320 megawatts of capacity which will be up for relicensing between the present and the end of 1993 and Niagara Mohawk and New York State Electric and Gas Corporation have many, many other hydroelectric projects whose licenses expire thereafter. These projects, licensed for fixed terms by the FERC, represent the very cream of those electric utility systems in the sense that they are among the lowest cost modes of generation available to meet consumer demand. As such, these hydroelectric projects moderate electric consumers' rates by avoiding recourse to more expensive modes of generation. As the investor-owned electric utility sector in New York State serves 98% of the customers of the state, it can be readily seen that the benefits of those hydroelectric projects owned by Niagara Mohawk and New York State Electric and Gas, the majority of which are located in our Adirondack North Country region, are widely distributed to the over 2,000,000 customers of these utilities, including the 1,100,000 people in the Adirondack North Country region.

ANCA does not believe that the public interest would be served by an existing licensee's loss of these low cost hydro generating facilities since such a development would occasion higher energy costs to consumers. Without passage of S. 426, the Electric Consumers Protection Act, loss of these hydroelectric projects can very well become a reality since numerous economic and tax incentives exist to compel interest in these resources. It is a natural area of interest and concern for ANCA given ANCA's concern for any erosion of the business climate or base in the Adirondack North Country area and the extremely beneficial and positive effect that the hydroelectric projects of Niagara Mohawk and New York State Electric and Gas have on jobs, the tax base of the area and the rates charged consumers for electric service.

ANCA is also greatly concerned that Congress, in developing legislation to address the relicensing of hydroelectric facilities, might limit its focus only to public utility versus investor-owned utility fray. ANCA would urge the Subcommittee to recognize that another group of hydropower license holders, namely, the forest products industry, and other industrial hydro site operators with unique circumstances, will also be affected by what this Subcommittee does. Indeed, the 14-county Adirondack North Country area is interspersed not only with hydroelectric projects developed by Niagara Mohawk Power Corporation and New York State Electric and Gas Corporation but also with hydroelectric projects developed and used by the forest products industry. For example, Finch, Pryn and Co. has a licensed hydroelectric project on the upper Hudson River at South Glens Falls, New York; Georgia Pacific has several licensed developments on the Black River; Beaver Falls Power Company operates licensed facilities on the Beaver River in conjunction with Boise Cascade's plants on the Beaver River; International Paper's Corinth plant utilizes hydroelectricity generated at two licensed developments on the upper Hudson River; Hampshire Paper Company and Groveton Paper Company each operate licensed projects on the Oswegatchie River and Burrows Paper Corporation has a licensed hydroelectric plant on the Moose River in the heart of the Adirondacks.

Many of our forest product mills have historically used waterpower in the operation of their manufacturing processes. The hydroelectric facility is often physically integrated into the mill itself. The economies of many communities -- particularly those isolated communities in which many of our mills using hydropower are located -- are highly dependent of the economic viability of the mill. The mill is often the major employer within the community. Loss of a license could cause a mill to be non-competitive in the marketplace, causing it to be closed. In these circumstances, it goes without saying that the local community, small that it may be, would suffer severe economic distress.

The Adirondack North Country Association strongly supports S. 426, the Electric Consumers Protection Act of 1985, witness our resolution of support attached hereto as Attachment 3. This is a pro-consumer bill which provides an effective means of protecting the New York State electric consumers and the forest product mills that presently receive the benefits of power generated from hydroelectric projects licensed to investor-owned electric utilities and the various forest product companies doing business in New York State. This legislation amends the Federal Power Act to provide that any existing hydroelectric project licensee shall receive a new license if their projects have been and will continue to be operated in the public interest as determined by the Federal Energy Regulatory Commission (FERC). S. 426 does not call for any substantial change in existing law. It simply clarifies the intent of Congress regarding the issue of whether a municipal preference applies when the FERC relicenses hydroelectric facilities.

In addition, S. 426 provides that in the event a new licensee is awarded an existing project, the previous licensee shall receive just compensation as determined by the FERC in accordance with due process of law. This standard, as opposed to the present standard of net investment plus severance damage, is necessary in order to provide the existing licensee with full compensation for the loss of the future benefits of hydroelectric power generation.

The millions of New York's electricity customers who benefit from hydroelectric facilities presently licensed to Niagara Mohawk Power Corporation and New York State Electric and Gas Corporation would incur higher electric rates if these utilities were forced to transfer the projects to another licensee. Property tax revenues might be significantly and adversely impacted as might be the jobs of the employees who operate and maintain these facilities or the jobs of the people in the forest product plants which rely on hydroelectric generation to keep their plant's product competitive in the marketplace. In short, the economic base which ANCA has been striving diligently to reinforce and build on behalf of our 1,100,000 people is in danger of being eroded.

In essence, S. 426 involves questions of fairness and equity. The public interest is best served by providing that any existing hydroelectric project licensee will receive a new license if the project has been and will continue to be operated in the public interest. By clarifying the procedures for the relicensing of hydroelectric projects, S. 426, more than any other bill presently before the Subcommittee, will accomplish that goal and thus permit existing project licensees, be they utilities or the forest products industry, to plan effectively and economically to meet their future electric generation needs in upstate New York.

On behalf of the 1,100,000 people of our region, the Adirondack North Country Association urges Senate consideration and passage of S. 426, the Electric Consumers Protection Act of 1985.

A DECLARATION OF INTER-DEPENDENCE

ATTACHMENT 1

ON BEHALF OF THE 1,000,000 CITIZENS RESIDING IN THE FOURTEEN COUNTIES PARTICIPATING IN THE ADIRONDACK NORTH COUNTRY ASSOCIATION, AND

IN COOPERATION WITH COMMERCE, MANUFACTURING AND TOURISM OF NORTHERN NEW YORK, AND

IN RECOGNITION OF THE CONTRIBUTION OF THE 10,000 FARM FAMILIES IN THE ANCA REGION,

THE BUSINESS AND COMMUNITY LEADERS PARTICIPATING IN THE SUMMIT CONFERENCE AT CLARKSON UNIVERSITY ON SEPTEMBER 14, 1984

- TAKE NOTE OF THE PRIDE AND INDEPENDENCE OF THE NORTH PEOPLE AND PLEDGE ABIDING CONCERN FOR THEIR WELFARE, AND FOR THE ECONOMIC FUTURE OF THE AREA.

- EXPRESS RESPECT FOR THE COMMUNITIES AND THE PEOPLE WHO HAVE MAINTAINED THEIR ENVIRONMENT AND FOSTERED THEIR GROWTH.

- URGE AND SUPPORT A PRACTICAL COURSE OF ANCA ECONOMIC ACTION, BASED ON REALITY AND PROMOTING THE MANY ATTRIBUTES AND STRENGTHS OF THE REGION AND OF EACH OF ITS UNIQUE COMMUNITIES.

- ACKNOWLEDGE THE SIGNIFICANT ROLE OF OLDER CITIZENS WHO HAVE KEPT FAITH WITH THE NORTH COUNTRY, AND RURAL WOMEN AND THE YOUTH WHO WILL PROVIDE THE INGENUITY AND THE ENERGY NECESSARY FOR AN EXPANDED ECONOMY.

- ACCEPT THE RESPONSIBILITY TO CONTINUE THE DIALOGUE INITIATED AT THIS CONFERENCE, THE RESPONSIBILITY TO PROVIDE LEADERSHIP, AND PARTICIPATE IN THE PARTNERSHIP REQUIRED TO SERVE THE NEEDS AND ASPIRATIONS OF OUR NORTH COUNTRY NEIGHBORS IN THE ANCA REGION.

FOR ANCA Frank A. Augsbury Jr.
FRANK A. AUGSBURY JR.
PRESIDENT-ELECT

ATTACHMENT 2

Adirondack North Country Association

The Adirondack North Country Association
and Regional Economic Initiatives
June, 1985

ANCA identifies these actions in an 8-point program.

1) Agricultural Development. Dairy farming, apple orchards, vegetable and grain production, maple syrup production, and other farming pursuits share the North Country's landscape and way of life.

ANCA believes that improved product development, marketing and more farm product processing in the region can create jobs, add to the total value of goods produced here, benefitting all the region.

2) Tourism. Our remarkable landscape of mountains, lakes, rivers, farms and forests, and attractions such as the Olympic facilities, bring visitors from around the world, and make the North Country's biggest business. But we lack top quality tourism promotion and a plan for investing in tourism.

ANCA calls for a separate Department of Tourism in New York, and a regionwide program of attracting and guiding tourists. Development of theme highway trails, a coordinated system of visitor centers, and a heightened awareness of our region and the importance of tourism to the region, make up ANCA's program.

3) Small Business and Craft Development. Virtually all new job creation in the United States is in the small business sector. The North Country must encourage small business growth and new start-ups if we are to create new jobs.

ANCA seeks increased financial opportunities for small business (through improved availability of venture and high-risk capital, revolving loan funds, etc.), and management assistance to improve product development and marketing.

One of the primary small businesses of the North Country is crafts. ANCA is working to improve financial opportunities and management assistance for crafts, while building similar capabilities in other small business sectors.

4) Forestry. One of the North Country's major industries, and a critical part of its way of life is logging, timber manufacturing, papermaking and enjoyment of the forests that produce those goods.

Future health of the industry in the North Country requires means of assuring supplies to wood manufacturers and additional processing of that wood in the region so that jobs and value to the economy are added here.

5) **Energy**. Energy may be the most significant cost for many existing and potential new businesses in our region.

ANCA believes that our scarce energy resources must be further developed, and that we seek to maximize the jobs created for each unit of energy consumed.

6) **Transportation**. Businesses can better market, tourists can better travel, only when the transportation system is adequate.

ANCA works for improvement of each mode of the North Country's transportation system.

7) **Education and Museums**. Our young people prepare for new jobs; they and our guests learn of our heritage, through our educational institutions, to include our museums.

ANCA brings together area educators in support of projects that increase out awareness of the North Country's physical environment, history, and develop new job skills.

8) **Health and Human Services**. Social services are both an important aid to the North Country residents, and a major employer. ANCA plays an active role in keeping this sector a vital part of our way of life.

ATTACHMENT 3

Resolution Supporting Proposed Federal Legislation to Provide that Existing Licensees of Hydroelectric Projects Shall Receive a New License if Their Projects Have Been and Will Be Operated in the Public Interest

RESOLVED, the Adirondack North Country Association, being vitally interested in the fourteen county Adirondack North Country area of upstate New York, supports an amendment of the Federal Power Act to provide that any existing licensee shall receive a new license for a hydroelectric project unless the existing licensee's operation of the project would not be in the public interest as determined by the Federal Energy Regulatory Commission under the standards presently in the Act and, should a new license for the project be issued to a licensee other than the existing licensee, the new licensee shall pay to the existing licensee just compensation as determined by the Federal Energy Regulatory Commission in accordance with due process of law.

ADOPTED this 9th day of May, 1985.

Adirondack North Country Association

Senator MURKOWSKI. Thank you very much, Mr. Augsbury. Our next witness is Ms. Connolly.

Ms. CONNOLLY. Mr. Pizzagalli is representing the Chamber, and I am here to answer any questions you may have.

Senator MURKOWSKI. Thank you.

STATEMENT OF ANGELO G. PIZZAGALLI, PRESIDENT, PIZZAGALLI CONSTRUCTION CO., ON BEHALF OF THE U.S. CHAMBER OF COMMERCE, ACCOMPANIED BY SUSAN L. CONNOLLY

Mr. PIZZAGALLI. Good afternoon. I am Angelo Pizzagalli, president of Pizzagalli Construction Co. in South Burlington, VT. I am appearing today on behalf of the U.S. Chamber of Commerce. I am a member of the board of directors of the New England Council, whose president, Eric Swider, serves on the U.S. Chamber's Energy Committee. Accompanying me is Susan Connolly, manager, energy and natural resources policy for the U.S. Chamber.

The chamber appreciates the opportunity to testify before this subcommittee and express our support for S. 426. We are greatly concerned about the potential negative effects on electric consumers should any preference be extended at relicensing.

The chamber views the matter of hydroelectric relicensing as an equity and fairness issue. We want to assure consumers of a continuing adequate supply of electricity at a fair price. Our policy does not support a preference for any party. We argue that relicensing should be based on the public's interest, not an arbitary preferential basis.

To that end we support granting a license at the time of relicensing to any existing licensee, be it an investor-owned utility, private company, or municipality, provided the FERC judges the existing licensee's project will be best adapted to serve the public interest.

Furthermore, we urge anyone who believes his plans would be best adapted to file an application with FERC to demonstrate other merits that the existing licensee's project fails to meet the public interest. Understanding that licenses issued by FERC are for a set period of time, it still seems strange that any party should be given preference for a new operation.

A competent operator would be pretty upset if they had done a good job of maintenance and operation for 50 years and someone was able to take over when their plan was no better than the existing.

It is important to note that any preferences do not lead to greater productivity, only rearranging capacity. It seems to me time would be better spent improving efficiency and productivity rather than trying to advantage one group over another.

Uncertainty of future ownership and cost is very awkward for both supplier and user. It leads to hesitancy in investment and maintenance and improvement in facilities near license expiration dates. Power generators have difficulty in planning capacity and power users can't plan on future costs.

We urge you to pass S. 426. Thank you.

Senator MURKOWSKI. Thank you very much.

[The prepared statement of Mr. Pizzagalli follows:]

LET'S REBUILD AMERICA
IN THE 80's

Statement of the Chamber of Commerce of the United States

ON: HYDROELECTRIC RELICENSING

TO: SUBCOMMITTEE ON WATER AND POWER OF THE SENATE ENERGY AND NATURAL RESOURCES COMMITTEE

BY: ANGELO G. PIZZAGALLI

DATE: JUNE 11, 1985

The Chamber's mission is to advance human progress through an economic,
political, and social system based on individual freedom,
incentive, initiative, opportunity and responsibility.

The Chamber of Commerce of the United States is the world's largest federation of companies and associations and is the principal spokesman for the American business community. It represents more than 180,000 companies plus several thousand other organizations such as local/state chambers of commerce and trade/professional associations.

More than 90 percent of the Chamber's members are small business firms with fewer than 100 employees, 53 percent with fewer than 10 employees. Yet, virtually all of the nation's largest companies are also active members. We are particularly cognizant of the problems of smaller businesses, as well as issues facing the business community at large.

Besides representing a cross section of the American business community in terms of number of employees, the Chamber represents a wide management spectrum by type of business and location. Each major classification of American business--manufacturing, retailing, services, construction, wholesaling, and finance--numbers more than 14,000 members. Yet no one group constitutes as much as 29 percent of the total membership. Further, the Chamber has substantial membership in all 50 states.

The Chamber's international reach is substantial as well. It believes that global interdependence provides an opportunity, not a threat. In addition to the 53 American Chambers of Commerce Abroad, an increasing number of members are engaged in the export and import of both goods and services and have ongoing investment activities. The Chamber favors strengthened international competitiveness and opposes artificial U.S. and foreign barriers to international business.

Positions on national issues are developed by a cross section of its members serving on committees, subcommittees and task forces. Currently, some 1,800 business people participate in this process.

STATEMENT
on
HYDROELECTRIC RELICENSING
before the
SUBCOMMITTEE ON WATER AND POWER
of the
SENATE ENERGY AND NATURAL RESOURCES COMMITTEE
for the
U. S. CHAMBER OF COMMERCE
by
Angelo G. Pizzagalli
June 11, 1985

I am Angelo G. Pizzagalli, President of the Pizzagalli Construction Company, in South Burlington, Vermont. I am appearing today on behalf of the U.S. Chamber of Commerce. I am a member of the Board of Directors of the New England Council, whose President, Eric Swider, serves on the U.S. Chamber's Energy Committee. Accompanying me is Susan L. Connolly, Manager, Energy and Natural Resources Policy, for the U. S. Chamber.

The Chamber appreciates the opportunity to testify before this Subcommittee and express our support for S. 426, the "Electric Consumers Protection Act of 1985." We are greatly concerned about the potential negative effects on our members and other electric consumers should any preference be extended at relicensing.

The Chamber views the matter of hydroelectric relicensing as a consumer equity and fairness issue. We want to assure consumers of a continuing, adequate supply of electricity at a fair price. We are concerned about the potential effect on our members and other electric consumers if shifts of hydroelectric licenses occur.

We believe that S. 426 offers a fair and equitable resolution to the relicensing issue for the following reasons:

1) it does not support a preference for any party; and

2) the license would be awarded competitively to the party whose plan is best adapted to serve the public's interest.

BACKGROUND AND SUMMARY OF POSITION

Hydroelectric facilities owned and operated by muncipalities,* investor-owed utilities (IOU)** or private companies require a federal license to operate. These licenses are granted for a maximum of 50 years. Hydroelectric plants are advantageous because they provide low-cost, fuel-free power.

The Federal Power Act (FPA), passed in 1920, provides municipal power systems a preference in the granting of original licenses (16 U.S.C. 800(a)). This preference is a reflection of public policy at that time and was intended to give the then newly emerging municipal utilities access to hydroelectric power. However, because of vague wording in the 1920 Act, whether or not the same preference exists at the time of relicensing has been the subject of litigation during the past eight years. Because the Federal Energy Regulatory Commission (FERC) and the courts have reversed themselves on the issue, the Chamber urges congressional resolution.

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*Federal Power Act defines a "municipality" as a "city, county, irrigation district, drainage district, or other political subdivision or agency of a State competent under the laws thereof to carry on the business of developing, transmitting, utilizing or distributing power."

**Investor-owned utilities serve more than 74 million customers or approximately 75 percent of all electric users. Of these, almost 66 million are residential customers; the other eight million are commercial, industrial, and agricultural customers.

One hundred and seventy-seven IOU facilities are scheduled for relicensing between now and the end of 1993. Sixty licenses of other private companies are subject to relicensing through 1993. Currently, 11 IOU licenses are being contested by municipalities claiming a preference. Potentially, the remaining 166 IOU-operated facilities could lose their licenses in the next decade should the arbitrary municipal preference be extended at relicensing. IOUs have hydro projects in 32 states; other private companies have facilities in 27 states.

The U.S. Chamber of Commerce supports an amendment to the Federal Power Act to include a rebuttable presumption that existing licensees should be granted a new license. FERC could incorporate any necessary terms and conditions at relicensing, as needed for the public interest.

Our policy does not support a preference for any party. We argue that relicensing should be based on the public's interest, not an arbitrary preferential basis. To that end, we support granting a license at the time of relicensing to any existing licensee, be it an IOU, private company or municipality, provided the FERC judges the existing licensee's project will be "best adapted" to serve the public interest. Further, we urge anyone who believes his plans would be "best adapted" to file an application with FERC to demonstrate on the merits that the existing licensee's project fails to meet the public's interest. (Our position does not address the existing preference muncipalities enjoy at the time an original license is issued nor the preference for marketing power from federal projects municipalities currently enjoy).

We challenge the equity and logic of a municipal relicensing preference under which customers of IOUs and private companies would pay needlessly higher prices when the plan of the municipal challenger serves the public interest no better than the existing licensee.

POTENTIAL ECONOMIC EFFECTS OF A MUNICIPAL RELICENSING PREFERENCE

The primary benefit of hydroelectric power is that it generates electricity without burning costly fuels, such as oil and gas. Of the 97 million electric customers in the United States, IOUs serve 74 million users or 75 percent; municipal and state systems serve 13 million users or 13.6 percent of the country's electric customers. Despite their fewer customers, state and municipal utilities have access to more than twice the nation's hydroelectric capacity as IOU's.

The Edison Electric Institute, the association of investor-owned electric companies, estimates that should all 11 IOU developed and operated projects for which municipalities have filed competing applications be turned over to municipalities, the effect would be an immediate increase in electric rates of $308 million a year from fuel costs alone. (This figure is based on 1983 generation and expressed in 1983 dollars.) The six utilities with the 11 contested facilities in their generating systems serve more than 8.6 million customers; the competing municipalities currently serve 936,000 customers.

If a principle of municipal relicensing preference is established, potentially 177 IOU-operated hydro facilities could lose their licenses in the next decade, and more could follow. Ratepayers could potentially pay between $1.5 billion and $4.5 billion per year to make up for the lost hydro generation, if all licenses were transferred.

In my state of Vermont, five IOUs operate 19 hydroelectric plants; several additional facilities are operated by another private company. Two IOUs, Central Vermont Public Service Corporation and Green Mountain Power Corporation, operate 12 of these facilities. Together, they serve more than 175,000 customers or 70 percent of all electricity users in Vermont. Most of Vermont is on these two systems, so hydroelectric relicensing is an important issue of consumer equity and economics.

Green Mountain Power, which provides electric service to my company, operates three hydroelectric facilities. It estimates its electric rates would increase by approximately 2.8 percent or $2.6 million more per year should a municipal relicensing preference be granted.

My company is not a big electricity user. In 1984 we spent $66, 271 on electricity for our office buildings and warehouses, plus an additional $10,800 for power at our construction sites served by Green Mountain. Still, a 4 percent increase would amount to more than $3,000 per year. Clearly, there are other customers on Green Mountain's and other utility systems for whom the increase will be much larger.

For example should municipal systems take over all nine of the projects currently operated by Central Vermont Public Service Corporation, the increase would be nearly 5.5 percent. There are more than 500 industrial customers served by Central Vermont.

In Michigan, where there is substantially more industrialization than in Vermont, the economic arguments against granting a municipal relicensing preference are even more compelling.

One Michigan utility, the Consumers Power Company, estimates that a municipal relicensing preference would mean a two-percent rate increase for its customers. Such an increase would mean that a typical automotive plant which uses 14.9 million kilowatt hours ((kWh) per month, at a cost of $790,000 per month, would have its monthly bill increased by $16,000 or $200,000 per year. There are 10 such plants served by Consumers Power in Michigan.

A two-percent rate increase would also mean that a typical machine shop using 257,000 kWh per month, now paying $15,231 per month, would pay an additional $300 per month or $3,600 per year more. Consumers Power provides electricity to 677 such businesses in Michigan.

There are several reasons for the rate increase. First, replacing electricity generated by the lost hydro projects would require some IOUs to purchase more expensive replacement power from another utility, perhaps from the municipal utility that took over the facility. Second, the lost power may have to be replaced by purchasing an interest in the generating capacity of another utility. And third, IOUs could need to construct new generating plants sooner than otherwise anticipated in order to meet increases in electricity demand.

In Vermont, the rate increases would occur because both Central Vermont and Green Mountain Power would need to replace the lost hydropower with more expensive fuel sources. Central Vermont would most likely need to burn oil, one of the most costly fuel sources; Green Mountain would need to purchase power from Hydro-Quebec, based on the price of oil or coal.

In takeover instances, should the municipalities not require the entire amount of new hydro generating capacity to meet their customers' requirements, the unneeded portion could be sold back to the IOU who lost the facility.

Additionally, because in many states municipal property is exempt from taxation, municipal takeover of IOU and private company hydro facilities could cause significant tax losses to local and state treasuries.

Should a municipality take over an IOU's or private company's hydroelectric plant outside its own jurisdiction, the local community in which the hydro facility is located would be faced with a loss of tax revenues resulting in budget cutbacks or a necessity to raise other taxes. Many such communities depend on privately held hydro plants as a source of property tax revenues which are used to help pay for schools, police and fire protection and other services.

Another concern we have is what would happen to employees of these facilities should a municipal preference be instituted and ownership change. In our opinion, this would cause needless disruption in the economic welfare of the communities and hence to local businesses. Specifically, if the loss of valuable hydro generation capability means that the local IOU must raise its rates to replace the power with more expensive sources of electricity, this would, in turn, increase the cost of doing business for our members who would need to either reduce employee payroll or raise their prices.

HYDROELECTRIC POWER BENEFITS CURRENTLY AVAILABLE TO MUNCIPALITIES

Municipalities currently receive hydroelectric benefits from several sources, including the initial licensing preference granted by the Federal Power Act and wholesale power purchases from IOUs with hydroelectric facilities as part of their system.

In addition, municipalities receive "preferred status" to purchase most of the hydropower generated from taxpayer-subsidized federal projects built by such agencies as the Bureau of Reclamation and the Army Corps of Engineers. Federally-generated hydropower accounts for nearly half of all the hydroelectricity in the United States.

Of the 11 municipalities who are claiming a preferred licensing status, four are recipients of hydropower from federal projects. This hydropower often permits municipalities to charge lower rates than the IOUs in the same area.

Many municipal electric companies are also wholesale customers of IOUs that have hydropower as part of their system. As such, customers of these municipalities receive the cost benefits from the hydroelectricity on the IOUs systems.

S. 426 -- THE EQUITABLE ANSWER

S. 426 is needed to clarify the Federal Power Act to end conflicting interpretations of the 65-year old law. Without a congressional resolution, municipalities claiming a statutory preference could "take" generating facilities from those who built and paid for them and do so without paying the facilities' current worth.

S. 426 is equitable. It does not support a preference for any party. The bill provides that existing license holders of a hydroelectric project -- whether an IOU, private business, or municipal system -- would be issued a new license unless FERC determines the project would otherwise not be operated in the public interest. The existing licensee would not receive a new license if FERC finds the "project . . . will not meet the licensing standards set forth in section 10(a)" of the FPA (S. 426, Sec. 3, paragraph 3). This section states that the existing licensee's project would have to be

> "such as in the judgment of the Commission will be best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce, for the improvement and utilization of water power development, and for other beneficial public uses, including recreation purposes. . ."

This standard would also take into consideration the effects on customers of existing licensees if the project were transferred.

S. 426 promotes competition. Anyone believing his plans would be "best adapted" could file an application and try to demonstrate on the merits that the existing licensee's project failed to meet the FPA section 10(a) test.

S. 426 provides equitable compensation to the former license holder and its customers if FERC should issue the new license to another applicant. The bill uses the standard of "just compensation" derived from the Fifth Amendment of the Constitution. This standard will allow FERC to take into account all relevant considerations in determining how to compensate an original licensee for the loss of the project. As now written, the FPA provides that a license-holder whose project is taken over is to be paid "net investment" plus "severance damages." Municipalities interpret "net investment" to be the original cost of the plant less accrued depreciation. They further contend that neither the current cost of replacing hydro plants with other kinds of generating plants nor the cost to ratepayers of other, more costly forms of replacement power requires compensation.

CONCLUSION

The members of the U.S. Chamber believe that the vague wording of the Federal Power Act requires congressional resolution in order to end the eight years of irresolution by the FERC and courts. So far, the confusion and uncertainty have prompted muncipalities to contest 11 IOU facilities. But, as other IOU and private company licenses expire, there are certain to be additional challenges.

The Chamber wants to ensure that consumers have access to adequate supplies of electricity at fair rates. We do not believe that the FPA extends the municipal preference to the time of relicensing, nor do we believe such a preference is fair or would assure consumers they will have the electricity they need at equitable rates. For that reason, the Chamber urges Congress and this Subcommittee to support S. 426, the "Electric Consumers Protection Act."

Senator MURKOWSKI. Are there any other witnesses that have any other comments? Ms. Connolly, you have no comments?

Ms. CONNOLLY. No.

Senator MURKOWSKI. We would appreciate on behalf of Senator Evans, who introduced his bill just 2 days ago, to know whether or not you would have any comment on his legislation. He asked that I pass that on to you, and if you would care to respond, we would appreciate it. If you don't, why that's understandable. Any comments? Have you had a chance to look at it?

Mr. PIZZAGALLI. We will provide a written response.*

Senator MURKOWSKI. Thank you.

Well, we are going to excuse you. Thank you very much.

Mr. PIZZAGALLI. Thank you.

Mr. AUGSBURY. Thank you.

Senator MURKOWSKI. We appreciate your testimony, and we appreciate your indulgence.

Panel 5, that will be Mr. D.R. Von Raesfeld, city manager of the City of Santa Clara, Santa Clara, CA; Mr. James W. Beck, director of electric utilities, Santa Clara, CA; Mrs. Ann Taylor, board member, Sacramento Municipal Utility District; Mr. Gordon W. Hoyt, public utilities general manager; Mr. David W. Penn, general manager, Wisconsin Public Power System; and Mr. Randall W. Hardy, superintendent, Seattle City Light Department.

I welcome the panel to the Water and Power Subcommittee hearing. We are having a vote currently. We are on a 15-minute rollcall, and when the five bells go off I will have to leave and vote. I intend to try and have this hearing over by 5 o'clock for many reasons, so I would appreciate you being as expeditious as possible, and I will make no further comments. Please proceed as you wish.

STATEMENT OF DONALD R. VON RAESFELD, CITY MANAGER, CITY OF SANTA CLARA, CA

Mr. VON RAESFELD. Mr. Chairman, if I might, I am Donald Von Raesfeld, city manager of the city of Santa Clara. I appreciate the opportunity to be here, and I would ask that the written testimony that I presented be included in the record.

Senator MURKOWSKI. I have a warm spot for Santa Clara in my heart. I went to Bellerman High School and Santa Clara University.

Mr. VON RAESFELD. So did I.

Senator MURKOWSKI. We had plenty of electric power and a good football team.

Mr. VON RAESFELD. I appreciate the opportunity to give the Santa Clara story. We have heard a lot about Santa Clara this afternoon already, or this morning. I just have to tell you that we have been competing for a license with PG&E now for 13 years. We have not yet even gotten to hearing on the merits of the issue. PG&E has now had a 60-year license, not a 50-year license, and we continue to ask why not a timely hearing as required by the law? We support the American Public Power Association position, but if the law has to be compromised then we fall in and support the Metzenbaum bill.

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*Retained in subcommittee files.

PG&E has told a one-sided story. It uses the over 3 million monthly bills it sends to its customers, its regional managers, and extensive contacts with the public to tell a one-sided story. That might explain the proliferation of letters you have in your files.

PG&E says the law is ambiguous as to how expiring licenses should be renewed. Having lost in the courts, the monopolistic industry now seeks to change the law in Congress. Santa Clara believes now, as when it filed its application, that the law is clear and its position has been upheld by at least one recent FERC decision, the 11th Circuit Court of Appeals, and the Supreme Court.

I ask, shouldn't you ask the question as to why the private power companies challenge the law now rather than 15 years ago or when we first filed for the license, or as you heard from their own testimony, when the law was changed in 1953 and apparently there was another opportunity at that time to discuss it?

The existing law came after years of congressional debate and private power company pressure and at the time was accepted by the companies. Congress at the time wanted competition, and we think it still should have that.

The city of Santa Clara relied on the present law and the legal process and has to date spent close to $1.5 million in the application processing. I am pleased that members of this committee realize that they are treating the issue of licensing God-given waters that belong to all of the people of these United States, and I hope that remains a very key point in your deliberations.

Santa Clara's competition in its proposed license application has provided some benefits otherwise unavailable to the public, and let me enumerate some of them.

First, we have offered to replace some wildlife lands, about 1,400 acres of them, a wildlife management program, a sharing of project revenues with the counties in which the project is located, coordination with the Western Area Power Administration for the benefit of the California Power Pool, and the last one, which we did way back when we started, was proposed a gift deed of the project to the Federal Government after we had amortized the project out with a provision for a contract with the Feds for a continued supply of power.

None of the above were proposed by PG&E. Only a real competing applicant who felt that it had a fair chance could make any proposals such as these. I think this has been confirmed by a GAO report done last year that addressed this subject. I ask you to place yourself in the place of our elected councilpersons, and with the proposed Wallop bill and Johnston bill. Would you spend public money to compete?

The present law now forces private utilities to perform better than under the proposed changes. One has to question their motives in this forum when their support in other consumer-oriented issues like construction work in process and tax normalization were noticeably absent before this Congress.

I would have to respond to Mr. Mielke's statement that Santa Clara has one-half of its power from the Western Area Power Administration. That is half true, as many statements by them are.

Our allocation diminishes as other loads grow in the area, and we will have not more than 65 megawatts of Central Valley Project power available to us and only through the year 2004. That is projected to be only 10 percent of our demand.

We received that only after a lengthy court battle with PG&E and our Federal Government. PG&E through its monopoly control of transmisson has delayed the ability of small power systems such as ours to develop their own resources. In the relicensing, they have a policy of not wheeling from a relicensed project.

PG&E approved the issuance of a new hydro license to the Calaveras County Water District who has a contract with smaller cities in Northern California as a part of the Northern California Power Agency. That demonstrates to you how easy it is to get a new resource developed in California. Some of the myths about Santa Clara that we have listened to, that there is a heavy increase in the cost on PG&E should Santa Clara prevail. Santa Clara and other public agencies in our area have gone into debt to provide a balanced resource for our citizens.

A copy of a recent newspaper article claims that we are paying—claims that we are in that kind of debt, and I just show that to you. It says we are $1.3 billion in debt. The article goes on to say that that is a greater debt per capita than the Federal Government has, so you should feel good about that. We are paying today's costs to develop new projects.

I think that is a point that has really been missed here. As we developed our own projects, we replaced PG&E power that is being provided to us. That means they can cut off their expensive generation and thus provide a savings to their customers. You have not heard anything about that today.

It is our belief that the savings from these kinds of projects that we are involved in developing will more than offset the cost and the loss to them of the Mokelumne project. Relicensing doesn't create or destroy customers. The Stauffer Chemical gentleman should meet with some of our Fortune 500 companies who are competing worldwide and to whom power from the city of Santa Clara is extremely important. You've heard testimony on their customers and the impact of relicensing.

The bottom line of most of the opposition by American industries that we have heard today is that we just don't want any competition. Am I to believe that equity applies only for the majority, and because Commissioner Bagley says we are an unimportant minority we should be cut out totally?

Another prevalent argument, and one that I'd kind of like to conclude with, has been protection of their customers who have paid for these projects. I must inform you that we predate PG&E as a utility in the State of California. We have been a customer since they came into business, and if that argument has any validity, then our customers, our citizens who are customers of ours and we've been a customer of theirs, certainly have an equity right and a proportionate share of hydro that they've helped pay for. Should they have to purchase that hydro through a private power company's cash register? I think not.

I would like to conclude by asking you to remember in your deliberations that our elected officials relied on existing law when they filed the application for competition over 13 years ago. Thank you.

Senator **Murkowski**. Thank you very much.

[The prepared statement of Mr. Von Raesfeld follows:]

STATEMENT OF DONALD R. VON RAESFELD, CITY MANAGER
CITY OF SANTA CLARA, CALIFORNIA
BEFORE THE COMMITTEE ON ENERGY AND NATURAL RESOURCES
SUBCOMMITTEE ON WATER AND POWER
UNITED STATES SENATE

JUNE 11, 1985

On behalf of the City of Santa Clara, I would like to thank the Chairman and the members of this Subcommittee for the opportunity to testify on the issue of the proposed changes to the present law governing the relicensing of federally-licensed hydroelectric projects.

My name is Donald R. Von Raesfeld, and I am the City Manager of the City of Santa Clara, California. For over thirteen years, the City has been engaged in an effort to compete with Pacific Gas & Electric Company (PG&E) before the Federal Energy Regulatory Commission for the right to operate a hydroelectric project known as the Mokelumne Project. We have yet to get to a hearing on the competitive merits of our separate proposals.

PG&E is the largest privately-held utility in the United States, and the largest private holder of hydroelectric capacity in the United States. It has used the extensive communications network it has with its over 3-million customers to tell a one-sided story about the federal law that governs the licensing of hydroelectric projects. That law, known as the Federal Power Act, was passed by Congress in 1920, over the vigorous initial opposition of PG&E and other private utilities. One of the key provisions in that law is the preference provision, now known as Section 7(a), which gives to municipals, irrigation districts, and states a preference for the project license if their competing applications were equally well matched to those of a private applicant. So strongly did Congress feel about the preference, that they further extended it to provide an additional opportunity for the municipal to match a better project, if the Commission found that the private applicant's proposal were better.

The Congress that passed the Federal Power Act in 1920 was not misguided. They were practical men who appreciated the great power, political and otherwise, that corporations like PG&E could exert; and they were determined to bring things into balance in the competition between consumer-owned electric systems and the large, privately-held utilities. They knew that the IOU's could act more quickly, more flexibly, and without the political fishbowl and other regulatory constraints within which public bodies must act. With the preference, they felt they could help to balance the competition between these often disproportionately-sized competitors.

The City of Santa Clara relied on the Federal Power Act in 1972, when it filed a competing application to PG&E's at the time the Mokelumne Project license was about to expire. Since that time, the City has spent close to $1.5-million to present FERC with a better project and to establish the law in this field. The City has gone all the way to the Supreme Court, which left standing a decision of the 11th Circuit that held that, as a matter of law, the preference provision was applicable in relicensing. That was in the year 1983. Later that year, we were shocked to find that the FERC had purported to reverse the Supreme Court in an unrelated case. To date, the FERC has refused to give Santa Clara a hearing, even though it told the D.C. Circuit Court, two years ago, there was nothing that prevented the parties from going to a hearing.

The proposals before you today are, for the most part, a belated effort on the part of the private utility sector to reverse decisions made recently by the federal courts and to prevent, in our view, a further loss on review of the FERC's purported reversal of the courts in the Merwin case. Having lost before the FERC in 1980, the 11th Circuit in 1982, and the Supreme Court in 1983, the industry now seeks to change the law, and to halt, in mid-stream, the pending license applications---only 11 in number--that are now before the FERC. Please keep this in mind: only 11 of the over 125 licenses that have expired have resulted in competing applications involving municipalities.

In 91 cases, the existing licensees have had their licenses renewed. The other applications are without competition and have passed the point in time where competive applications could be timely filed. Even the limited amount of competition represented by these 11 competing cases, however, is too much for the private sector to tolerate!

In Santa Clara's view, the loss of competition provided by even these 11 pending applications will have ripple effects of far greater magnitude for the public in general. Specifically, our proposal for the Mokelumne Project demonstrates the broader, public interest considerations a public agency can bring to the licensing process. Santa Clara has committed hundreds of acres of city land for a wildlife refuge and has agreed to fund a wildlife management program--something PG&E did not do. Santa Clara has agreed to turn over a portion of the Project output to the counties of origin--something PG&E refuses to do. The net impact of Santa Clara's proposed agreement in this regard would be to add annual revenues of in excess of $4 million to these counties. Santa Clara has agreed to negotiate with the federal marketing agency for distribution of Mokelumne power on the most economical basis for all of California(including PG&E) throughout the California grid --somothing PG&E would not consider. We will keep the Project in its present state to avoid the inundation of further scarce wildlife reserve lands in the area--something PG&E proposes to do. Ultimately, it will be up to FERC to decide which proposal is the better proposal--but Santa Clara believes that the competitive process, working under the present law, gives the public a choice of how this resource should be used, and has given the broader public recreational and environmental opportunities not otherwise forthcoming. Indeed, during the recent Merwin argument in federal court, counsel for the State of Washington specifically requested that the environmental benefits secured through a competitive relicensing process be maintained, whatever the court ruled on the other issues. In short, competition by two entities with often significantly different approaches can provide the fullest range of options for the public. We believe that is a real plus for the public.

The Wallop Bill and the Johnston Bill before you would kill competition in hydro relicensing. The Wallop Bill, in particular, which is identical to the Shelby Bill in the House (H.R. 44), is designed to provide, quite simply, for perpetual use by the existing licensee. In the case of the Mokelumne Project, that would be PG&E. The Metzenbaum Bill, which is similar to the Matsui Bill in the House (H.R. 1959) would retain the preference in cases of a tie, but there would be no opportunity, after the proceedings are ended, for a municipality to match a private project found to be better; that bill would also mitigate the effect of the project loss on the private utility's consumers by permitting FERC to allocate a portion of the power from that Project, at cost, for the use of those customers. Jim Beck, the manager of our electric department, will explain why the Mokelumne Project is so critical to our City today. But I would like to raise with Congress the question whether the Wallop and Johnston Bills are truly in the public interest for the future.

In California, water is a precious commodity. Fifty years from now, I believe it will be even more valuable. The hydro projects located in California contain some of the most valuable water impoundments in our State. In fact, one of the competing applicants, Tuolumne Regional Water District, is competing for PG&E's tiny 1.2 MW Phoenix Project in order to develop and secure an adequate water supply system for the area it serves. It would use the hydro revenues to upgrade a water system badly neglected under PG&E's ownership, and would use the Project impoundment for long-term water supply purposes as well. The Wallop and Johnston Bills would, in effect, place perpetual control of these valuable resources in the hands of the large privately-owned electric utilities, rather than permitting the governmental agencies to again re-assess these projects after fifty years or so. If passed, they would impose a burden such as to be impossible to meet, and there will be no fresh examination of the possibilities of the sort which a competitive application would develop.

Last year, the General Accounting Office prepared a letter in response to a request from Congressman Ottinger that was made a part of his Subcommittee's hearing record on this issue last year. It concluded that in the majority of proceedings involving competing license applications, the existing licensee subsequently upgraded its application in response to the competing license application.

In an era of deregulation, when the Congress has removed monopoly protection from many industries in order to obtain the benefits of competition to the customers of those industries in the long run, the Wallop and Johnston bills are an anomaly. For what they would accomplish is to functionally preclude competition, and the Wallop bill would create a wholly tilted playing field for what competition might still occur, if any. Santa Clara has lived with PG&E for nearly a century and is well acquainted with it. While PG&E has its strengths, it can scarcely be cited as a model for efficient planning and construction of the sort that would usually be thought to occur in a competitive environment. What competent industrialist, driven by competition from others, would be so unconcerned about the ultimate effect of his construction costs on his prices as to permit a major part of his new and most expensive plant to be built backwards? Yet that is precisely what seems to have occurred at PG&E's Diablo Canyon Nuclear Project. If you have absolutely captive customers, then it doesn't matter, I suppose, since they will have to pay whatever costs are incurred. But if there were more competitive pressure, then PG&E would either shape up its management or lose customers, as new municipally or cooperatively owned systems were set up. That pressure, I submit, would do more for the citizens of California, and the Nation, than any attempt to freeze existing situations. I suspect that the costs associated with the Diablo Canyon overrun resulting from lax construction supervision far exceed even PG&E's unsubstantiated claims of loss from the relicensing of all four projects upon which it faces competition. Indeed, if PG&E and the rest of the proponents of the Wallop-Shelby line of bills were really serious about the interests of their ratepayers, they would not have pushed so strongly for the right to charge construction work in progress ("CWIP") and tax "normalization" to their ratepayers, an amount which I believe also dwarfs any possible loss to ratepayers if all projects at issue were to be relicensed to others.

The Wallop Bill is worse than the Johnston Bill, from the point of view of the competitive process for one very basic reason. Under this country's cost-based method of utility regulation, a utility is permitted to charge its customers for the costs of service. When capital assets are involved, the so-called "rate base" upon which the utility may earn a return is that portion of the costs of those capital assets not already paid for by the customers in the form of depreciation. PG&E's

customers thus are served by its generating resources, and those leased from the government by license, like Mokolumne, at the net depreciated cost, essentially the cost currently established by Section 14 of the Federal Power Act, and the cost at which Santa Clara would acquire the project, if its new plans were found to be best adapted, if no change is made to the Act. Thus, at present, identical changes which might be proposed by Santa Clara and PG&E would have identical results on customers, except to the extent that Santa Clara may not insist upon as high a return on its investment. But if Santa Clara has to pay PG&E a cost well in excess of that which PG&E is presently carrying, it drastically changes the positions of the parties. For PG&E can, and in the case of competition would be expected to, improve the project up to the point where the project, viewed by itself, is still economic, but no further. But if Santa Clara has a much higher cost to begin with, the amount of investment that could be utilized in improvements to the project before it becomes no longer economic would be much less. This hardly comports with the notion of a level playing field, but does comport with the idea of a permanent, though hidden, subsidy to prevent competition.

Nor is this the only example of the lack of a level playing field which we have run into in the years of dealing with PG&E. For years, PG&E refused to permit us access to the transmission grid built by it and by the federal government;

Santa Clara was a captive customer of PG&E. When PG&E was finally challenged on anti-trust grounds in the course of an NRC license application, it agreed to provide transmission and typical electric services to Santa Clara, among others, but on a basis which, as it later told the FERC, would permit it to withhold transmission service to a hydroelectric project on which the license was transferred to another. In other words, PG&E is so unconcerned about a "level playing field" that it is willing to permit the citizens of California to do without the benefits of the hydroelectric power from _any_ plant which the FERC decides should be licensed to someone else with a better plan rather than transmit it. We believe, of course, that such a "dog in the manger" refusal would be itself an example of PG&E's unfitness to be a licensee of a national resource, and also directly actionable, but the example of the problems with which we live is hardly that of a level playing field.

There are other instances of PG&E's willingness to use its monopoly power to limit the level of participation by other competing utilities. The Calaveras County Water District (together with NCPA, and Santa Clara) has been engaged in seeking a license for a large, new hydroelectric project on the North Fork of the Stanislaus River. The FERC determined that the best development of the site would include inundating a very small (and soon-to-expire) PG&E project. Although the Water District agreed to pay PG&E a fair price for the loss of its project, the

Company refused to negotiate, except on its terms, and under the law, its unwillingness to negotiate ended the matter. Thus, a better project, as determined by FERC under Section 10(a) of the Act, was barred by PG&E. Exclusive control of those hydro sites in PG&E has led to a more narrow, selfish approach than should have resulted from the project which was proposed by the Water District and found to be more desirable by the FERC.

The City of Santa Clara has operated an electric distribution system since 1898. As such, it was surely one of the cities intended to be covered by the preference. It seems exceedingly sad to me that the federal hydro licensing provisions, which were enacted with foresight and with sensitivity to the realities of monopoly, and after extensive consideration of the sort of arguments now being pressed upon this Congress by the investor-owned segment of the industry, should now be changed without a single preference entity receiving a license under this provision. Perhaps that is the measure of the strength of the private utility sector today; perhaps it is also the result of the myths and half-truths that have surrounded discussion of this issue.

The extensive redrafting of the Federal Power Act which is proposed in S.426 (The Wallop Bill), which reverses the intent of the drafters of the Act in several areas, and S.403 (The Johnston Bill), which does not go quite so far, but would also have the effect of drastically rewriting the Act, is particularly unfair since it would permit PG&E to prevail against Santa Clara by legislative fiat rather than by fair competition. We honestly believe that Santa Clara's proposal for the Mokelumne Project is a better use of the Nation's resource in the falling water, a better and more efficient use of the power and power site for all of California, and, in the long run, better for PG&E and its ratepayers. It seems grossly unfair to us to allow the FERC to stall for years on a hearing for Santa Clara's proposal for the Project, to require Santa Clara to expend hundreds of thousands, indeed millions of dollars in public funds in accordance with the Act and the regulations as they stood, and then to adopt the arguments of PG&E, with all of the legislative resources at its command, on the basis of myths and half truths to eliminate competition and preclude Santa Clara from its day in court.

In order to set the record straight, at least in this forum, let us discuss some of these myths:

Myth 1. If the law remains the same today, PG&E will experience hundreds of millions of dollars in increased costs.

Response: This was effectively rebutted in the testimony presented before Congressman Ottinger's subcommittee last year. In fact, PG&E's loss of the Mokelumne Project, and the other major projects subject to relicensing as well, would result in an additional increase in costs of only slightly more than $18 million, approximately 0.3% of PG&E's electric operating revenues, shown by its latest report to shareholders as $5.4 billion. If the Mokelumne project were licensed to Santa Clara and no other changes were made, I am advised that PG&E's costs would decrease, rather than increase. I note that the revenues for the recent time period reflected in that report did not reflect the large jump expected when Diablo Canyon 1 and 2 are fully reflected in rates. PG&E did not present any study to the Ottinger subcommittee of how it derived its substantially higher cost estimate, although I understand it had promised to do so. Moreover, if the project were relicensed to Santa Clara, PG&E, in all probability, would not replace the Mokelumne Project since its present resources far exceed its demand. Indeed, the deletion of the Mokelumne Project would permit PG&E to use its remaining resources more efficiently, and its customers would benefit from the higher utilization of these resources.

Myth 2. The Cities are "stealing" the projects built by PG&E.

Response: Mokelumne Project was not planned or originally filed for by PG&E but by a Mr. Preston. When he had completed the initial work to obtain the permit from the Federal Power Commission, PG&E refused him transmission, and Mr. Preston then had to sell the project to PG&E. Moreover, PG&E has recognized from the inception of the Federal Power Act that it had but a limited lease on the licensed facilities. Its Vice President testified in 1918 that he anticipated that cities like Santa Clara would probably seek and obtain the subsequent license, but that the Act's assurance to PG&E of the opportunity for a satisfactory return during the initial license and assurance of the net investment payment at the end was a fair compromise. No one at PG&E can fairly claim to be surprised by the result of the Bountiful case before the FERC or the Eleventh Circuit; Santa Clara cannot "steal" from PG&E what belongs to the Federal Government, especially when Congress (with PG&E's ultimate concurrence) drafted the existing Federal Power Act to give Santa Clara a fair crack at the next license.

Myth 3. Competition for hydro projects is meaningless.

Response: Santa Clara's proposal has resulted in potentially more wildlife areas, replacing in part lands originally inundated by the Project. Likewise, additional recreational opportunities will be presented by Santa Clara's proposal, and its proposals have spurred PG&E to complete a fisheries study it had otherwise refused to complete (on the grounds that its annual license was too short to warrant the expenditures of the six-year study). The counties of origin will benefit from Santa Clara's offer to permit them to share in the project output. Santa Clara has agreed to negotiate with WAPA for dedication of Mokelumne output to a larger marketing area, which would permit WAPA to increase its resources without requiring additional federal funds and to improve the load dispatching within the area. These specific examples, together with the GAO report of last year to which I have referred, should demonstrate the error of this myth.

Myth 4. Relicensing to Santa Clara would deprive the stockholders of their capital.

Response: At the time PG&E was issued a license for the project, it knew that the license term expired in fifty years and that the recapture price would be the net investment. During the term of the license, PG&E's shareholders have received a return on their investment; if Santa Clara is awarded the license, PG&E's shareholders would receive net investment (approximately $40-million), which would be distributed directly to these shareholders. If PG&E retains the project, these shareholders will continue to receive a return on the remaining investment, rather than receiving a lump sum.

Myth 5. There will be competition for expired licenses even without the preference provision.

Response: Even with the preference provision, I am not aware of one private utility that has filed in competition to another private utility for an expired license. The only competition that has occurred has been by the public entities seeking to compete with existing, privately-owned utilities, and between Indian Tribes and existing licensees (both public and private). As for municipals, I can assure you that, in most cases, municipal systems could not compete for existing licenses under the provisions of the Wallop or Johnston bills. Under those bills, even if the municipal could propose an equally well-adapted project--a determination only known after millions of dollars have been expended to prepare a license and wait out the years of litigation--it would automatically lose to an existing licensee. Unlike private utilities, which simply pass these expenses through in their rates, and take the tax advantages associated with those expenses, the municipal system must constantly justify any expenditures to its consumers and governing elected boards; nor is it able to receive tax deductions for its expenditures. Instead, it would have to expend public dollars where the field is tilted against it. There are few managers I know of who could justify this kind of expenditures to their City Councils or their citizens-consumers, especially given the magnitude of the costs for competing for these projects.

Myth 6. PG&E will have to replace every project transferred to a municipal with a new project.

Response: PG&E and other private licensees have escalated the claimed costs of transferring the projects to municipal applicants by "pricing" these projects at their replacement cost new. In reality, it is highly unlikely that a new plant would be constructed if such a transfer occurred. This is simply because, in most cases, the licensee transferring the project will have a lower load following the transfer, since the transferee will have been an existing customer; the licensee may well be in an excess capacity situation (in which case it would not run out and replace the unit); and in coordinated operations, the regional supply will be unaffected if both the existing licensee and the new licensee are in the same pool. For the most part, these considerations are present in PG&E and Santa Clara's situation.

I thank the Committee for giving me the opportunity to testify today. If there are any questions, I shall be pleased to answer them, or to supply additional information for the Committee or the record.

Senator MURKOWSKI. Mr. Beck.

STATEMENT OF JAMES W. BECK, DIRECTOR, ELECTRIC UTILITY DEPARTMENT, CITY OF SANTA CLARA, CA

Mr. BECK. Thank you, Mr. Chairman. My name is James Beck. I am the director of the electric utility at Santa Clara, appearing on behalf of the city.

Santa Clara is one consumer-owned utility that takes its responsibility seriously, and is making every legitimate effort to secure for its consumer owners, residential, commercial, and industrial, a reliable supply of reasonably priced electricity well into the future. I believe that the testimony I have provided for you indicates, the prepared testimony indicates that substantially and I would ask you to incorporate that in as if read in total.

I would now like to now discuss this issue with you in terms of what I will call the four C's of hydroelectric licensing bills that are being considered by this committee. The four C's are confusion, competition, control, and consumer benefits.

The privately held utility companies use confusion to help build their case for change, overlooking the contributions of other segments of the industry, downplaying the value of competition and licensing so as to keep monopolistic control of the bulk power supply system resulting in substantially less consumer benefits than otherwise achievable.

Let us look at each C briefly. First, confusion. The private companies say the existing law is unclear. It was not unclear to the original FERC who heard the case in 1980. It was not unclear to the 11th Circuit Court of Appeals nor to the Supreme Court when they held that a municipal preference existed in relicensing of hydroelectric projects. The private companies say the Wallop bill will clarify the existing law. It in fact completely changes the existing law and completely eliminates competition and relicensing.

They say it is a simple little consumer issue. It is not a public-private utility fight. I submit to you that 33 witnesses and a room full of people hint otherwise. They say the change is required, but in their own pamphlet, on page 14, a pamphlet from which a couple of charts were used this morning that you looked at, they say—and I quote: "There is wisdom in the old adage, 'if it ain't broke, don't fix it'."

Senator Evans was getting to that point earlier. That is precisely how we feel. That is precisely how the Metzenbaum bill would tend to handle the relicensing issues. The courts are currently working on these issues.

The second C, competition. The privates somehow believe that even though the law were to be changed as they advocate so that licenses would continue in the hands of existing licenseholders unless they were somehow shown to be unfit, competition would still be keen. In fact, there would be little, if any, incentive to compete for licenses in such circumstances, and that is just what the privates want.

Senator Evans has asked clearly the question at the heart of this issue: Should the original licenseholders have a right to expect anything more than they received when they were awarded the license? I submit for your consideration that the answer is no.

Further, if the decision is to be based on the numbers of customers involved, no competition is ever going to be warranted. Such a decision criterion overlooks all other benefits to the public such as diversity within the industry, competition to improve the public resources, and sharing of public resources among more elements of the public. Why seek such results, you might ask?

Simply, our third C, control: to control the resources in their geographic area and to continue to control the extent to which the publics can benefit from them. That is, only through purchased power from those who hold the projects, and to continue to control access to those and other resources through restrictive transmission wheeling policies.

The fourth C, the issue of consumer benefits. Not only has the existing licensee had the use of the resource for the license period, but he has amortized his investment in that time period, earning a return or profit, something we do not hear said much, on that investment for his stockholders for taking the risk. It is over and it is done.

That is why the license period is 30 to 50 years. His consumers and his stockholders are compensated for any remaining unamortized investment, and by the terms of Senator Metzenbaum's bill they are further compensated by the new licensee to mitigate the impact if any, and I stress, if any, of providing new resources to their existing customers.

Mr. Chairman, that concludes my remarks. I thank you for the opportunity to appear before you.

Senator EVANS [presiding]. Thank you very much.

[The prepared statement of Mr. Beck follows:]

STATEMENT OF JAMES W. BECK, DIRECTOR,
ELECTRIC UTILITY DEPARTMENT
CITY OF SANTA CLARA, CALIFORNIA
BEFORE THE COMMITTEE ON ENERGY AND NATURAL RESOURCES
SUBCOMMITTEE ON WATER AND POWER
UNITED STATES SENATE

June 11, 1985

I would like to thank the Chairman and the members of this Subcommittee for the opportunity to testify today on an issue of substantial importance to the City of Santa Clara: whether there will continue to be competition in the relicensing of hydroelectric projects.

My name is James W. Beck and I am the Director of the City of Santa Clara's Electric Department. The Department serves the City of Santa Clara, California, a 19-square mile area with a population of 89,600. Santa Clara is in the heart of the Silicon Valley area, and its load is projected to exceed 370 MW this year. 80% of the City's power is delivered to industrial customers, many of whom are in the forefront of the nation's competitive thrust in the world market.

Although the City has had an electric distribution system since the 1890's, it was forced for years to rely upon others, primarily PG&E, for its supply of power, and only recently was able to break the bottleneck of transmission control to become involved in developing its own generation resources. As a member of several joint powers agencies under California law, Santa Clara is a co-owner of a number of generating resources which will serve the State and its people well for the future. Thus, Santa Clara is one of the founding members of the Northern California Power Agency (NCPA), a joint powers agency established in 1968. Through NCPA, Santa Clara participates in several generation projects, including hydro, geothermal and gas units. (A table showing how Santa Clara's resources are projected to meet its loads in 1985 is attached, as Attachment A.)

It also is a member of MSR, another joint powers agency. Through that agency, Santa Clara owns a 47.3 MW portion of MSR's 135 MW San Juan Coal Project, a coal-burning project located in Arizona, and is engaged in exploring a 50 MW geothermal prospect. Santa Clara is also developing several small hydro projects in northern and central California. These projects are listed below:

Black Butte - 6.1 MW
Stony Gorge - 4.9 MW
High Line Canal - 0.35 MW

The City also owns a 5.8 MW cogeneration plant from which it delivers byproduct, steam, to one of its industrial customers. Thus, Santa Clara, on its own and together with other municipal systems in California, has brought, not only to its own system, but also to the entire California area, a varied set of power resources that should serve the region well.

In order to take delivery of its resources, Santa Clara has an interconnection agreement with PG&E, the only electric system to which it is directly connected. Santa Clara has also recently joined with other private and public utilities to study, and develop if feasible, a Third Intertie Project. This line would roughly parallel the existing 500 Kv AC Intertie lines between California and the Pacific Northwest. When constructed, that line will add at least 1600 MW of transmission capacity on the line itself, and because it will remove many of the present stability constraints on the now-existing intertie lines, will provide those entities with access to the existing lines a very substantial amount of additional capacity on those lines. Santa Clara has been one of the leaders in the attempts to construct that line, which should be of substantial benefit both to the Pacific Northwest and to California, but which clearly would not have been built if matters had been left to the investor-owned segment of the industry.

Apart from its own resources, Santa Clara receives power from WAPA and as a customer of the Pacific Gas & Electric Company. (See Attachment A) Most of Santa Clara's resources in the future will have to come from comparatively new plants, and its WAPA allocation is subject to decreasing availability. Accordingly, Santa Clara needs to acquire a hydro resource that will enable it to have the diversified resources necessary to operate its own system as well as a low-cost resource to balance its fairly expensive new capacity. The Mokelumne Project is a key element in Santa Clara's plans to provide a reliable, competitively-priced power supply to its consumer-owners, including its many industrial customers who, in turn, must compete on the domestic and international markets for their products, as well as to the residential and commercial customers who are our owners. (I am attaching copies of two letters sent to FERC recently by our industrial customers which highlights the importance of this issue, as Attachment B.)

I hope to present to you a picture of one public power system that, through its actions, is working hard to keep its identity and to serve its customers well. From our experience in California, we believe that an active public power sector is critical if the electric utility industry is to provide the most efficiently-priced power to its customers. So long as there are different sectors in the electric industry--public and private--the industry will be able to compete within itself to devise ways to better meet customer demands. The proposed Third Intertie is an example. Without the initiative of the public sector, the Third Intertie would not be even a consideration in the regional power picture. Nevertheless, with a Third Intertie, the possibility of economical transactions between California and the Pacific Northwest for the benefit of both private and public customers is considerably enhanced. In short, even though the power industry is regulated, there are things that a competitor can force a private utility to do that would not otherwise lie within the power of any agency, federal or state, to do in the public interest. More importantly, if there is not competition from knowledgeable competitors, many desirable changes are simply not thought of, so the basic issues involved never even come to the attention of the regulators.

Public-private competition or yardstick competition also serves the public. Santa Clara's rates have, for varying reasons over time, remained lower than those of PG&E. Whatever the reason, the existence of those lower rates serve to keep PG&E on its toes. Indeed, this was painfully acknowledged by one of PG&E's own officers, who noted, way back in 1969:

> This (competition from municipally owned utilities) is real tough competition. It is a threat. The only way we can combat it is to increase the efficiency of our operation, and to provide our customers with the best possible utility service. The Meaning of Competition to PGandE, p. 5, W. D. Skinner, Manager, East Bay Division, PG&E (October 7, 1969).

Thus, for the general consuming public, there are additional benefits that cannot be obtained without the presence of a competing utility. Furthermore, numbers alone would not tell the whole story. For example, benefits to the public stem from the sort of pioneering effort in conservation of resources done by Santa Clara in establishing our solar swimming and solar domestic water heating programs, which we have provided to those buildings and residential uses for which this is an economic alternative to electricity or gas. Santa Clara has practiced energy conservation with diligence and a fair measure of success, both with its industrial and its residential customers. In fact, it has recently been given national recognition for its innovative efforts in this regard. (Attachment C).

It has become increasingly clear to Cities like Santa Clara who have recently begun to assume more responsibility for their own load resources, that their independence and viability simply cannot be assured without access to the variety and low cost facilities available to the larger, established utilities. Santa Clara has invested substantial time and public funds to secure its own hydro resources, whether as large as a portion of a brand new (and quite expensive) 200-MW project or as small as its Stony Gorge project (4.9 MW). These projects cost us in excess of $1000/kw. While Santa Clara believes that its power supply plans are as efficient as possible, we are still starting, as a result of being impeded for years by PG&E, from a point in time when power supply is much more expensive than PG&E's average cost. It is for this reason that we believe that access for Santa Clara to the Mokelumne project would be a fair way to rectify, in part, past actions by PG&E to keep Santa Clara out of the electric generating business.

The law recognized Santa Clara's right to seek the Mokelumne Project license as a competitor back in 1972. It is Santa Clara's position that it can demonstrate to FERC that its project is better, so long as the law is not weighted to give what amounts to a perpetual license to the existing licensee and Santa Clara has a fair chance to compete.

PG&E presently holds 29 licenses for 67 plants representing 3,317 MW of hydro capacity. Four of these projects are subject to competitive relicensing proceedings. It seems presumptuous to change the law, as interpreted by FERC, the federal Eleventh Circuit Court of Appeals, and the Supreme Court, simply to protect PG&E from having to compete meaningfully as these projects come up for relicensing. In addition, it should be noted that PG&E has control or receives the output from at least 32 plants representing 996 MW that are owned and licensed to irrigation and water districts in California.

The City of Santa Clara endorses the present law, but it recognizes that changes may well be in order to better reflect the environmental concerns and to mitigate the impact on the consumers of existing licensees. The bill introduced by Senator Metzenbaum would seek to improve the law in this respect, but it does not change the basic principle of competition. For these reasons, Santa Clara endorses Senator Metzenbaum's attempt to reconcile the conflicting values always present in a competitive situation. In short, someone wins and someone loses in any competition, but the basic goal for the public is that there is a contest to begin with. Only the existing law, or the proposal by Senator Metzenbaum will realistically bring competition into the field of hydro relicensing. As the record to date of relicensed projects demonstrates, it is unrealistic to expect the privately-owned utilities to compete against each other for these projects.

Up to now, I have discussed the power supply situation for Santa Clara and its need to have an economic power supply. In addition, it is important for Santa Clara, as its own dispatcher, to have the close, load-following capability of hydro power to meet its demands. Mokelumne would provide this capability for the City. There are, however, other points that Santa Clara would like to underscore, from the broader perspective, that urge the most serious consideration of Senator Metzenbaum's Bill. S. B. 1219 provides that in cases of relicensing, the successful license applicant will be required to provide access on its transmission system for other systems, upon reasonable terms and compensation. This provision is of extreme importance if any meaningful measure of competition is to prevail in the electric industry.

Access to transmission is the key to a competitive electric utility industry. Without it, a system cannot hope to engage in the hourly, daily, and longer-term exchanges and sales that permit it to bring economic and reliable power to its customers. PG&E's reluctance in the past to provide transmission access on fair terms to competing systems is well-known. The FERC staff, in a case producing one of the most voluminous records at the FERC, concluded that findings by an administrative law judge as to the reasonableness of PG&E's actions and tariffs for transmission to others "clearly establish PG&E has monopoly power over transmission...(and) those findings establish over two dozen instances of the exercise of that monopoly power." (Staff Brief on Exceptions, p. 98, Pacific Gas & Electric Company, FERC Docket No. E-7777-000, P-2735-001, P-1988-003, and P-233-006, filed May 1, 1984) These findings were not surprising to Santa Clara. As a more recent example, Santa Clara was, from the beginning of 1983 to the end of October of that year, unable to utilize the capacity from its share of an operating geothermal plant, which PG&E utilized while forcing Santa Clara to purchase from PG&E instead, because PG&E refused to transmit the power except under terms and conditions which we could not challenge at the FERC.

These and similar instances reflect the anticompetitive power exerted by giants like PG&E; their objective is not murky--it is simply to make competition by the municipals non-existent. These actions must be contrasted to other major publicly-owned transmission projects, which traditionally offer access to both private and public bodies. By directly addressing a key factor in promoting and assuring competition, the Metzenbaum Bill goes a long way in giving the electric consumers beneficial competition.

There is a general public need, too, for this Congress to consider transmission accessibility for both smaller and larger electric systems. Differences in regional growth, differences in availability of fuel sources, and other factors have combined to create surpluses in some areas of the Nation, and deficits in others. If transmission capacity were available, these regional surpluses and deficits could be readily and economically managed. Indeed, some areas of the Nation already engage in seasonal exchanges of considerable magnitude. Despite their obvious advantages, transmission capability is at a premium, with the result that consumers in surplus areas are paying higher rates for power they don't need because there is no way to get large blocks of power out of their regions; and consumers in deficit areas are paying for high-cost power generated from inefficient units, because of insufficient transmission capacity to bring in more economically-priced power. The savings from these transfers could be enormous. The United States Department of Energy estimated potential savings in the billions of dollars as far back as 1979, when power costs were lower than they are today in a study it conducted of the benefits of a National Power Grid. For the smaller individual systems, the restrictions on access to transmission are even greater, limiting their ability to create an economic power supply.

If transmission accessibility makes sense, then why doesn't it happen? As I have noted before, the incentives are simply not there for the large utilities to provide access.

Without the force of law, the instincts of the large, privately-owned utility sector will be what it always has been. Deny access--and watch the competition wilt away. Unfortunately, it's not only competition but the benefits that competition brings to consumers that also disappears. That's why Santa Clara respectfully requests that this Congress give priority to the passage of Senator Metzenbaum's bill, which clearly would establish that the public use by private utilities of the Nation's water resources warrants the access to transmission for public purposes.

One last public good should not be overlooked. The reliability of the Nation's electric system would surely be enhanced by the availability of greater transmission. Just as it was incumbent upon the federal government, for national security reasons, to establish federal reservations of strategic materials and fuels, a regional grid serves as a safety net for disruption in fuel supplies. Diversity in another region can be transported over electric transmission lines, and used productively to maintain the regional economy in another sector that would otherwise be hurt by oil shortages, coal strikes or other major fuel shortages. Moreover, absent the emergency, the lines can become a sources of economic exchanges, as described above. But few, if any, of these public purposes will materialize if left solely to the private electric utility sector. S.B. 1219 provides for competition in hydro relicensing, broadened transmission access, enhanced environmental standards, and consumer mitigation--that is a good start for all consumers, whether public or private. Accordingly, it is Santa Clara's hope that Congress will take this opportunity to enact long-overdue consumer incentives for this industry, as represented in Senator Metzenbaum's bill.

Thank you for this opportunity to appear before you today.

ATTACHMENT A

JCR

THE CITY OF SANTA CLARA
CALIFORNIA

ELECTRIC DEPARTMENT
CITY HALL
1500 WARBURTON AVE
SANTA CLARA CA 95050
(408) 984 3161

March 1, 1985

Mr. Elmer Kaprielian
Vice President, Electric Operations
Pacific Gas and Electric Company
77 Beale Street
San Francisco, CA 94106

Dear Mr. Kaprielian:

Enclosed is the City of Santa Clara's March 1, 1985 Planning Data report as required by Section 7.5 of the Interconnection Agreement between the City and PGandE. Although this report does not obligate the City or PGandE in any way to sales or purchases of services, the report does reflect our best current thinking regarding the City's future loads and resources.

Please note that because of the new single loss factors recently agreed to, some of the values for 1986 and 1987 vary slightly from those shown in the contractually binding Request for Services transmitted to you by the City letter dated September 25, 1984. We assume the revised figures will be incorporated into the 1986 and 1987 contract amounts.

A revised Exhibit A-4 is currently being prepared by the City, and will be transmitted under separate cover next week. If you have any questions please contact me at (408) 984-3044.

Very truly yours,

James W. Beck

JAMES W. BECK
Director of Electric Utility

Enclosure

City of Santa Clara March 1 1985 Planning Report

PROJECTED CITY OF SANTA CLARA
LOADS AND RESOURCES
1985 FORECAST
@BACKBONE OUTPUT

1985	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SYSTEM PEAK DEMAND (MW)	310.47	310.47	312.50	321.63	338.88	356.13	373.38	373.38	373.38	353.08	333.81	331.78
CONTRACTUAL EXPORTS (MW)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INTERRUPTIBLE LOADS (MW)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL PEAK DEMAND (MW)	310.47	310.47	312.50	321.63	338.88	356.13	373.38	373.38	373.38	353.08	333.81	331.78
RESOURCES:												
COGEN NO: 1	6.12	6.12	6.12	6.12	6.12	6.12	6.12	6.12	6.12	6.12	6.12	6.12
NCPA #2 1_/	58.81	58.81	58.81	58.81	58.81	58.81	58.81	58.81	58.81	58.81	58.81	58.81
TOTAL PROJECTS (MW)	64.93	64.93	64.93	64.93	64.93	64.93	64.93	64.93	64.93	64.93	64.93	64.93
WESTERN DELS @BACKBONE (MW)	151.18	151.18	151.18	151.18	151.18	151.18	151.18	151.18	151.18	151.18	151.18	151.18
PG&E PARTIAL REQS (MW)	94.37	94.37	96.40	105.53	122.78	140.02	157.27	157.27	157.27	136.98	117.70	115.67
CAP RESERVE @(.213) (MW-mo)	13.83	13.83	13.83	13.83	13.83	13.83	13.83	13.83	13.83	13.83	13.83	13.83
Provided By PG&E	13.83	13.83	13.83	13.83	13.83	13.83	13.83	13.83	13.83	13.83	13.83	13.83
SPINNING RES REQ'D (MW-d)	181.1	163.6	181.1	175.3	181.1	175.3	181.1	181.1	175.3	181.1	175.3	181.1
Provided By PG&E	181.1	163.6	181.1	175.3	181.1	175.3	181.1	181.1	175.3	181.1	175.3	181.1

FIRM TRANSMISSION SERVICES (@FUNCTION INPUT) MW-mo. 2_/
Generation Tie:
NCPA #2 3_/

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BackBone:	59.91	59.91	59.91	59.91	59.91	59.91	59.91	59.91	59.91	59.91	59.91	59.91
Area:	58.81	58.81	58.81	58.81	58.81	58.81	58.81	58.81	58.81	58.81	58.81	58.81

1_/ Capacity Rating Increase For This Unit Is Being Evaluated

2_/ Does not include Transmission Services for Partial Requirements Purchases.

3_/ Generation Tie To Be Provided by City

National
Semiconductor

Semiconductor
Division

2900 Semiconductor Drive
Santa Clara, California 95051
(408) 737 5000

Cable NATSEMICON
Telex 346353
TWX 910 339 9240

ATTACHMENT B

September 12, 1983

Mr. Kenneth Plumb
Office of the Secretary
Federal Energy Regulatory Commission
825 N. Capital Street, N.E.
Washington, D. C. 20426

Dear Mr. Plumb:

We support the application of the City of Santa Clara to obtain a license for the Mokelumne River Hydroelectric Project for at least the following reasons:

1. We believe a major strength of our country's economic system is in its diversity of suppliers engaged in competitive efforts to provide material and services at an appropriate balance of quality and cost. It is therefore fitting, in fact necessary, that this license be awarded to the City of Santa Clara to encourage and sustain such competitive diversity in the area of power supply.

2. At the present time, America's industries are in a battle with foreign companies who are being sustained by outright subsidies from their governments in efforts to defray their true manufacturing costs so as to be more competitive in international trade, specifically targetting the United States as an export market. The granting of a license to the City of Santa Clara will tend to offset those subsidies by maintaining a somewhat lower cost of power in an area where some of the most strategically critical industries of the future are located, i.e., the high tech complex of Silicon Valley.

We therefore urge that you consider the application favorably.

Respectfully,

C E Sporck

Charles E. Sporck
President

cc: E.A. Hangs, Santa Clara Chamber of Commerce
Don Von Raesfeld, City Mgr. Santa Clara
Nelson Walker, Director of Facilities, National Semiconductor

ATTACHMENT B

Marriott
corporation

MARRIOTT'S
GREAT AMERICA®

P.O. Box 1776
Santa Clara, California 95052

Jim Morrow
Vice President
General Manager
408/988-1776

RECEIVED
[illegible] 1983
[illegible]

October 17, 1983

Mr. Kenneth Plumb
Office of the Secretary
Federal Energy Regulatory Commission
825 N. Capital Street, N.E.
Washington, D.C. 20426

Dear Mr. Plumb:

My business has had the opportunity to be located in the City of Santa Clara since our beginning in 1976. During that time, we have had the opportunity to benefit first-hand, from the cost-conscious leadership and forward-thinking energy policies of this City and its staff. The City of Santa Clara and the Mokelumne River Project is yet another continuing example of concern for costs and being a front-runner of energy management policy.

We, therefore, not only heartily support, but recommend that the City of Santa Clara's application to license the Mokelumne River Project, be approved. They have the experience, the foresight, and the public's interest in ensuring effective low-cost energy for the entire community.

I might add also that while you will hear from a number of companies in the Santa Clara Valley, many of whom are in the manufacturing industry, you may not hear from many in the entertainment field. Reliable and cost-efficient energy is essential to providing for man's entertainment, as well as for its products. We have confidence in Santa Clara's concern for both.

Sincerely,

J H Morrow

Jim Morrow
Vice President/General Manager

cc: Betty Hangs
Executive Vice President/General Manager
Santa Clara Chamber of Commerce

Don Von Raesfeld ✓
City Manager
City of Santa Clara

JAM:mg

ATTACHMENT C

Public Power Weekly

OCTOBER 8, 1984

Six public power utilities honored in national contest

Six public power systems won recognition Oct. 1 from the Department of Energy's National Awards Program for Energy Innovation.

DOE Secretary Donald P. Hodel presented certificates in Washington, D.C., to these winners:

Special awards

—Austin, Texas, Electric Utility: *Conservation power plant.* A 553-MW reduction in future demand and avoidance of construction of large generating plant through a variety of conservation plans, including an appliance efficiency program which has saved 20.2 MW over a two-year period.

—Fort Collins, Colo., Light & Power: *Integrated energy service program.* For a comprehensive set of customer-related programs for energy conservation covering utility operational practices, customer service and educational outreach, community energy assistance and strategic planning.

—Peabody, Mass., Municipal Light & Power: *Energy conservation and shared savings program with municipal hospital.* J.B. Thomas hospital in Peabody is guaranteed a $345,000 savings in energy bills over 10 years under a conservation program conducted by a private investment firm and based on a $16,000 technical audit paid for by the utility.

—South Carolina Public Service Authority (Santee Cooper): *Residual energy application project.* Residual heat from two generating plants provides heat for horticulture and aquaculture operations.

National awards

—Santa Clara, Cal., Municipal Electricity Department: *Municipal cogeneration plant.* Two-unit plant provides steam to paperboard company and 5.8 MW electricity to city.

—Richmond, Ind., Power & Light: *District heating project.* As part of city's program to save energy and use energy alternatives, excess energy from a coal-fired plant at a state hospital is used to pump hot water to local greenhouses. The utility manages and maintains hot-water line.

The DOE program began early this year with a call by states for applications from innovative energy and technology transfer programs. The award-winning projects were judged to be "innovative applications of energy-efficient conservation and renewable energy technology which have a high potential for transfer to other groups." ●

Senator EVANS. Ms. Taylor.

STATEMENT OF ANN L. TAYLOR, DIRECTOR, SACRAMENTO MUNICIPAL UTILITY DISTRICT

Ms. TAYLOR. Gentlemen, I am Ann Taylor, an elected member of the board of directors of the Sacramento Municipal Utility District, and a president of the policy board's advisory council to APPA. You have had a long day, and you have heard a lot of testimony, a lot of it conflicting. I will be brief. I simply want to sum up what all of it means to SMUD: The right to compete. SMUD is the fourth largest public utility in the Nation, and it competes with PG&E, which is 10 times its size; 50 years ago PG&E requested that it be permitted to build a dam with a 50-year permit to use the falling water, a resource long in the public domain. In hearings at that time, PG&E made it clear that it fully expected the license to pass into the hands of the public utility upon expiration of that term. PG&E amortized their investment over their 50-year period, and they obtained a guaranteed profit on their investment, just as any good business would do.

However, now they want to change the rules of the game. They want to guarantee themselves the use of a public resource in perpetuity. They have used means to influence you as Senators on this subcommittee that the municipal utilities do not have a legal right to use.

We cannot advertise our needs and concerns to the public. We cannot use public moneys to finance the large grassroots lobbying campaign that the private utilities have funded. We cannot threaten our ratepayers with misleading claims of massive rate increases unless the Wallop and Shelby bills are passed.

Instead, we have to contact you directly, appeal to your sense of fairness and compassion, and give testimony in lengthy hearings such as this, all in support of a fair opportunity to compete on a level playing field.

I support and applaud Senator Metzenbaum's efforts in drafting his compromise bill. I support his proposal, even though SMUD has hydrolicenses that will be subject to challenge by other public and private utilities under the terms of his bill.

Their competition does not bother me, and it does not bother SMUD. However, fair competition surely seems to bother PG&E and other private utilities. They only will play if they get in their way to write the rules in their favor.

In the meantime they are left free to use their monopoly position to deny us access to cheap power and to refuse to wheel power to us on reasonable terms, despite their 40-percent excess capacity. This is why S. 1219's antitrust and wheeling provisions are also vital to ensuring publics, including ratepayers of both private and public utilities, the benefits of a healthy competitive environment.

Gentlemen, PG&E presently has 40-percent excess capacity on its system. SMUD is merely looking for a way to get access to an additional 1,000 megawatts of power to satisfy its ratepayers' needs for the next 20 years. I do not feel badly competing for a license that PG&E has already gotten full use of for 50 years.

And let me insert as an example the Rock Creek Cresta project. This was a project that is up for relicensing. SMUD is appealing to the courts to apply for that license. When first putting their license in, PG&E said that there was no need for any additional changes to the license application.

When SMUD responded, the capacity increase went up 46 percent. I think that is rather interesting for a project that did not need any improvement. The average energy kilowatt hours went up 199,000 kilowatt hours. I think that is significant.

There also were significant fish and wildlife protection benefits. The benefits of competition are many, and they produce necessary improvements in output and in fish and wildlife protection. Without competition, PG&E and others will, as they have in the past, ignore those potential improvements and simply seek to renew the licenses.

I urge you not to destroy a competitive system that so well serves the public interest. I urge you to support S. 1219 as the fairest and most responsible vehicle for preserving for all consumers the benefits of the competitive relicensing process.

Thank you.

Senator MURKOWSKI [presiding]. Thank you, Ms. Taylor.

[The prepared statement of Ms. Taylor follows.]

BEFORE THE SUBCOMMITTEE ON
WATER AND POWER OF THE
COMMITTEE ON ENERGY AND
NATURAL RESOURCES OF THE
UNITED STATES SENATE

TESTIMONY OF ANN L. TAYLOR
DIRECTOR, SACRAMENTO MUNICIPAL UTILITY DISTRICT
SACRAMENTO, CALIFORNIA

Dated: June 11, 1985

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TESTIMONY OF ANN L. TAYLOR, DIRECTOR, SACRAMENTO MUNICIPAL UTILITY DISTRICT SACRAMENTO, CALIFORNIA

Mr. Chairman and Members of the Subcommittee, my name is Ann Taylor, and I am here today as a publicly elected member of the Board of Directors of the Sacramento Municipal Utility District ("SMUD"). I also serve as Chairman of the Policy Boards Advisory Council of the American Public Power Association ("APPA"). This Council is composed of representatives of the elected officials who govern public power systems. I appreciate the opportunity to appear before you today and speak in support of competition and the public preference in the licensing of existing hydroelectric facilities.

I am here to discuss SMUD's experience as a consumer-owned utility which is competing with the largest private utility in the United States -- the Pacific Gas and Electric Company ("PGandE") -- for new licenses for two existing hydroelectric projects.

SMUD is particularly appreciative to Senator Metzenbaum for sponsoring legislation which stakes out a responsible middle ground between those of us who prefer the existing provisions of the Federal Power Act and those who seek to depart radically from the existing competitive process. Senator Metzenbaum, your proposal (S. 1219) accomplishes the difficult task of addressing the concerns of the private utilities, while preserving the essential elements of the Federal Power Act -- the public preference and meaningful competition in the electric utility industry. While we would prefer that the Federal Power Act not be amended, if Congress does determine that modifications are necessary, we are pleased to support your proposal.

My presentation today covers three principal points.

First, the public benefits from competition in the licensing process, regardless of who ultimately receives the new license. The competitive proceedings in which SMUD has been involved prove this point convincingly.

Second, the public preference was essential in our decision to compete. The public preference does not give consumer-owned utilities an unfair advantage. Rather, it balances the playing field between competitors of unequal size and resources and helps compensate for the inherent advantages of incumbency. If Congress eliminates the incentive offered by the preference and goes so far as to create a preference for the larger, better financed existing private licensee, it will not be possible or worthwhile for consumer-owned utilities to compete for existing hydroelectric facilities.

Third, Senators Wallop's and Johnston's bills (S. 426 and S. 403) would effectively eliminate meaningful competition for existing hydroelectric projects and the resulting public benefits. In contrast, Senator Metzenbaum's bill (S. 1219) would preserve competition and encourage diversity in the electric utility industry. While I have not yet had an opportunity to review Senator Evans' bill (S. 1260) in detail, the bill appears to have some strong positive elements. I am concerned, however, that the one-sided economic criterion in S. 1260 would effectively guarantee perpetual licenses to existing private licensees.

I. SMUD'S EXPERIENCE DEMONSTRATES THAT THE PUBLIC BENEFITS FROM COMPETITION FOR EXISTING HYDROELECTRIC PROJECTS

Let me turn first to a brief description of SMUD and its relationship with PGandE. I will then describe in more detail our pending relicensing competitions with PGandE and the public benefits which have already resulted from these competitions.

A. Description of Competing Applicants

SMUD is the second largest consumer-owned utility in the State of California and the fourth largest in the nation in terms of the number of customers served. We have approximately 370,000 customers in the Sacramento area and a generating capacity of 1,600,000 kilowatts.

SMUD has had substantial experience in constructing and operating hydroelectric facilities. Almost half of the power needs of our District are met by hydroelectric resources, principally the Upper American River Project in El Dorado County, California. SMUD has operated this project under FERC license since 1958. We strongly believe in maximizing the use of low-cost non-polluting existing hydropower resources consistent with sound economic and environmental planning.

In addition, SMUD has taken a leading role in promoting the use of other renewable energy resources. SMUDGEO No. 1, the District's 72-megawatt geothermal plant, went into commercial operation in late 1983. SMUD is participating with the City of Santa Clara and the Modesto Irrigation District in the Coldwater Creek Geothermal Project, which will include two 65-megawatt facilities. Last year SMUD also opened the world's first commercial central station photovoltaic facility to be built and operated by a utility. This facility produces solar energy.

Like the other public utilities in California, SMUD is at the mercy of PGandE and other private utilities for transmission facilities outside of its service area. For example, we were only able to open our new geothermal plant after difficult negotiations with PGandE for transmission of power from the project to our service area. We are also dependent on PGandE for back-up and supplemental power under a Power Sale, Exchange and Integration Contract. PGandE has given notice of cancellation of the contract effective January 1, 1988.

Although we are relatively large for a consumer-owned utility, SMUD is still only one-tenth the size of PGandE. PGandE holds licenses for 66 hydroelectric projects, with a total capacity of 2,370,000 kilowatts. Its hydroelectric capacity alone is 1-1/2 times SMUD's total generating resources. PGandE currently has total generating resources of 11,700,000 kilowatts, and this total will rise to over 15,000,000 kilowatts when its Diablo Canyon Nuclear Power Plant and Helms Pumped Storage Project become fully operational. This is approximately ten times SMUD's total generating resources. In 1983, PGandE's gross revenues totaled $6.6 billion, and its total assets exceeded $14.7 billion.

SMUD and PGandE are currently involved in two pending competitive proceedings at FERC for new licenses for existing hydroelectric facilities. The facilities are the Rock Creek-Cresta and Haas-Kings River Projects in California -- both previously licensed to PGandE. In each case, SMUD is competing as a member of a group of public entities called "SMUD-Cal Cities." The SMUD-Cal Cities group is comprised of fifteen consumer-owner utilities located throughout California, including SMUD, the Northern California Power Agency ("NCPA")[1] and the Southern California Cities of Anaheim, Azusa, Banning, Colton and Riverside, California.

B. The Beneficial Results of Relicensing Competition: Case Studies

In both of the proceedings which I will discuss, competition has already prompted proposals to improve the projects that, when implemented, will benefit all consumers regardless of the final outcome of the proceedings.

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[1] NCPA is a joint action agency composed of eleven cities and one rural electric cooperative in Northern California.

1. The Rock Creek-Cresta Project

The Rock Creek-Cresta Project -- which consists of two power plants located at the Rock Creek and Cresta dams on the North Fork Feather River in Plumas and Butte Counties, California -- has a dependable capacity of about 190,000 kilowatts and an average annual energy output of about one billion kilowatt-hours. PGandE's license for the project expired on September 30, 1982; since that time, PGandE's license has been automatically renewed on an annual basis pending a decision in the relicensing proceeding. Even though the Commission has not yet set the case for hearing, the benefits of relicensing competition are already apparent.

PGandE filed an application for a new license in September 1979, but did not offer any new benefits to the public. Instead of proposing to increase the capacity or average annual energy generation of the project or to improve the recreational uses of the facility, PGandE boldly claimed to be maximizing the public benefits of the project:

> "Licensee plans no additional power development over that already installed at the Rock Creek-Cresta Project. As outlined above, the existing Project develops the full potential power head of this stretch of North Fork Feather

> River and makes full use of all the water available for power production."

In December 1980, SMUD filed a competing application. SMUD proposed to upgrade the capacity of the existing powerhouses and to construct two new fishwater release powerhouses near the existing powerhouses. A second competing license application for the Project had previously been jointly filed by NCPA and the Southern California Cities of Anaheim, Azusa, Banning, Colton and Riverside.

Only after these competing applications were filed by consumer-owned utilities, did PGandE change its mind about the "full potential" of the project and "full use" of the water. And in May 1981, PGandE amended its license application to propose expansion of the project, including the construction of new powerhouses and upgrading of the existing powerhouses.

Seven months later, SMUD and the other previously involved consumer-owned utilities filed a consolidated competing application and proposed still more improvements in the project.

At Rock Creek, we proposed to construct an additional single-unit powerhouse with a capacity of

45,000 kilowatts, as well as a fishwater release powerhouse with a 720-kilowatt capacity. Similarly, we proposed to construct an additional single-unit powerhouse with a 20,000 kilowatt capacity at Cresta, and a fishwater release powerhouse with a capacity of 360 kilowatts. We also suggested the possibility of lining the presently unlined sections of the tunnels at the Rock Creek and Cresta powerhouses to increase further the capacity and the average energy.

The competitive process in this case also resulted in other public benefits. For instance, we agreed to allow the project area to be used for new recreational purposes, like cartop boating -- a public use that has been recommended by both federal and state agencies but that PGandE has consistently refused even to consider. After consulting affected federal and state agencies, we also proposed to install traveler information stations in the vicinity of the project and to construct a number of fishing access/parking areas -- again, to expand and facilitate the public use of this public resource. None of these other improvements was proposed by PGandE in its initial application.

2. The Haas-Kings River Project

The SMUD-Cal Cities group is also competing with PGandE for the new license for the Haas-Kings River Project. That project, located in Fresno County, has two powerhouses with a total dependable capacity of about 190,000 kilowatts and an annual energy output of 666 million kilowatt hours. PGandE's license for the Haas-Kings River Project expired on March 31, 1985.

In March 1982, PGandE filed an application for a new license for the project. This time, PGandE anticipated competition for the license, and proposed minor improvements to the project by replacing the existing turbine runner and transformer in the Kings River powerhouse.

But once again, competing applications demonstrated that the project could be significantly improved in other ways. In September 1982, SMUD-Cal Cities filed a competing application proposing to construct additional diversion dams, connecting pipes, drop shafts and a tunnel to divert the flows from Rancheria, Little Rancheria, Long Meadow and Teakettle Creeks to allow for greater flows of water to the project and correspondingly greater power production. We also proposed to construct a new powerhouse annex to be located adjacent to the existing Haas powerhouse tailrace. And we proposed to add a concrete lining to the existing unlined Haas tunnel to increase its capacity.

In September 1983 -- almost a year after our filing -- PGandE filed an application for an amendment of its license application and adopted our proposal to divert water from Rancheria Creek. In addition, PGandE proposed to expand the generating capacity of the existing Haas powerhouse.[1]

In addition to these increases in output, the competitive process for the Haas-Kings River license -- like the competitive process for the Rock Creek-Cresta license -- has led to environmental improvements. When PGandE filed its initial application, it promised to conduct environmental studies only if requested by various state and federal agencies. It did not, however, list or describe these studies, nor did it offer a schedule for their completion. Subsequently, we proposed to conduct studies on the impact of the project and the proposed improvements on water quality, fisheries, wildlife and recreation in the project area and to use the results to develop appropriate mitigation measures and environmental conditions to be included in the new license for the project.

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[1] Both SMUD-Cal Cities and PGandE's license applications for the Haas-Kings River Project were rejected for filing by the Commission in June 1984 due to certain alleged deficiencies in the environmental reports included in the applications. Under a schedule submitted to the Commission, PGandE filed a new license application for the project on March 5, 1985. Although it proposed improvements similar to those in its September 1983 amended application, PGandE did not match the improvements proposed in SMUD-Cal Cities' initial application. SMUD-Cal Cities is in the process of also preparing a new license application and is continuing to evaluate additional improvements to the project.

* * *

These two cases are textbook examples of the benefits of competition -- resulting in significant increases in the supply of inexpensive -- and nonpolluting -- hydroelectric power for California's citizens. The tables below summarize the power benefits -- specifically, the increased capacity and energy production proposals -- that have resulted to date from competition for the new licenses for the Rock Creek-Cresta and Haas-Kings River Projects. SMUD and the other consumer-owned applicants have proposed an increase in total capacity of 186,000 kilowatts, or 49 percent. PGandE's current competitive proposals would provide 83,200 additional kilowatts of capacity, which amounts to a 22-percent increase. Without the competitive spur provided by competition, PGandE almost certainly would have proposed no additional capacity. Indeed, in the Rock Creek-Cresta proceeding it did not propose any additional capacity.

No matter who receives the new licenses, these are the public benefits resulting from competition in the relicensing of existing hydroelectric projects.

Rock Creek-Cresta Project

		Initial Proposal		Response	
	Existing Project	PGandE	Public Applicant	PGandE	Public Applicant
		Proposed Capacity Increases			
Dependable Capacity (1000 Kilowatts)	189	0	25	46	66-126[3]
		Proposed Energy Increases			
Average Energy (1000 Kilowatt-hours)	1,007,000	0	39,000	80,000	123,000- 199,000[3]

Haas-Kings River Project

		Initial Proposal		Response
	Existing Project	PGandE	Public Applicant	PGandE
		Proposed Capacity Increases		
Dependable Capacity (1000 Kilowatts)	192	2.6	60	37.5
		Proposed Energy Increases		
Average Energy (1000 Kilowatt-hours)	666,000	26,900	58,000	52,800

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[3] The ranges of potential capacity and energy increases reflect estimates, which are necessarily inexact, as to the possible levels of benefits to be expected from lining of the currently unlined portions of the project

[Footnote continued on following page]

The results I have just described argue convincingly for competition in the licensing of existing hydroelectric projects. The proposed improvements to these projects -- benefits that can be measured in terms of additional capacity, energy output, environmental improvements and recreational facilities -- result directly from head-to-head competition between public and private utilities. Without competition -- or the threat of competition -- an existing licensee has no incentive to maximize the beneficial uses of a project. And, as I discuss below, the existing public preference is essential to maintaining the benefits of competition.

II. THE PUBLIC PREFERENCE MAKES POSSIBLE MEANINGFUL COMPETITION BETWEEN CONSUMER-OWNED AND PRIVATE UTILITIES

Private utilities have claimed that the public preference provides consumer-owned utilities with an unfair advantage in competition for new licenses for existing hydroelectric facilities. This is not true. What the public preference does is equalize the competition between competitors of unequal size and

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[Footnote 3 continued from preceding page]
tunnels. Even without any lining, however, our proposal is to increase capacity by 66,000 kilowatts and average energy generation by 123,000 kilowatt hours.

resources, thereby making competition by smaller, consumer-owned utilities possible.

When Congress enacted the Federal Power Act, in 1920, it recognized that public-private competition without the public preference is not evenhanded. Not only do private companies have far greater resources at their disposal; they are often free of the administrative and political constraints usually imposed on public bodies such as SMUD, whose Board of Directors is directly elected by its customers. Private companies are not required to conduct their business in public meetings, or to delay license decisions to obtain approvals from publicly elected officials. Given the vast resources of the large private companies and, on the other hand, the legal, economic and political restrictions on the risks that a municipal entity can take, I think it is fair to say that, without a public preference, there would be little, if any, competition from consumer-owned systems for hydro resources.

Certainly, if Congress enacts a preference for the large private utilities who currently hold hydro licenses, it will be tilting the scales so far towards the existing licensee that the prospect of meaningful competition by consumer-owned utilities will be eliminated. Moreover, even if the public preference were to be abandoned, why prefer an existing private licensee over a public applicant? The existing licensee has had rent free use of a scarce and valuable public resource to the enormous benefit of its customers for up to 50 years. It does not make sense to say that the existing licensee is entitled to a preference in competing for a new license when it already has enjoyed the benefits of the project for many years.

Moreover, as my fellow Directors and I well know, the license application process can require the expenditure of millions of dollars for technical assistance from engineers, lawyers and other professionals. Unless there is a reasonable possibility that a public system will obtain the license, it is unrealistic to expect that public officials will be willing to spend their citizens' money on such ventures.

To date, SMUD-Cal Cities has spent over $2.5 million in the Haas-Kings River and Rock Creek-Cresta licensing proceedings. Much of this money has been spent on the engineering studies which led to the improvements proposed in our license applications. In addition, the environmental studies required to support our license applications are very expensive. For example, at the request of the California Department of Fish and Game, we have committed nearly $200,000 for a study of mule deer migration in the Haas-Kings River Project area. Our streamflow and fish studies for the Project will cost more than $225,000. We are also conducting extensive studies of botanical, cultural and recreational resources. In addition, we anticipate spending substantial additional funds to complete our new license application for the Haas-Kings River Project and to prepare for and participate in the evidentiary hearings on the competing proposals for both projects.

We recognize the importance of the engineering and environmental studies required in the licensing process, but we are also keenly aware of their cost. What Congress must recognize in addressing this issue is that these costs pose a significant barrier to consumer-owned utilities. When combined with the inherent advantages of incumbency, the barrier becomes insurmountable without some compensating factor. This is why the public preference is so essential. It gives us the incentive to compete and sustains us during this expensive competition.

I can state unequivocally that the public preference played an essential role in SMUD's decision to compete for the new licenses for the Rock Creek-Cresta and Haas-King's River Projects. When we filed our license applications for the Rock Creek-Cresta Project in 1980 and the Haas-Kings River Project in 1982, we realized that the competition would be extremely difficult, lengthy and expensive. The resources of PGandE greatly outmeasure those of the SMUD-Cal Cities group. And, as we expected, PGandE has not hesitated to throw their enormous resources into the fight.

The role of the preference in promoting competition from the public sector is clear from the present record. In the ten competitive relicensing proceedings on file at the Commission, all of the competing applicants are consumer-owned utilities.

There is nothing unfair about public-private competition based on a preference for consumer-owned utilities in the event of a tie. No one is suggesting that a public body should receive a license if the FERC determines that the existing private licensee has proposed a better plan for the project than the public body. The preference acts as a tie-breaker. And we see nothing unfair about that -- especially where the benefits of a license have already flowed to the existing licensee for half a century.

I should also stress that when SMUD filed its first license application for an existing hydroelectric project in 1980, we clearly understood that public preference would apply in the proceeding. At that time FERC, in a unanimous decision, had just confirmed in the *Bountiful* case[4] that the public preference does apply to the licensing of existing projects. The Commission held that:

> "*the preference* of Section 7(a) of the FPA favoring States and municipalities over citizens and corporations *is applicable to all relicensing applications* in which States and municipalities, and citizens and corporations, request successor licenses for the same water resources." 11 F.E.R.C. at 61,711 (emphasis supplied).

That decision was affirmed by the United States Court of Appeals for the Eleventh Circuit and the United States Supreme Court refused to review the decision.[5]

Thus, when SMUD-Cal Cities entered into the relicensing competitions, it clearly had a reasonable expectation that the public preference would be applicable. Under these circumstances, fairness is on the side of allowing us to compete with the public preference and not permitting the private utilities to go back on the bargain they struck in 1920. I also think that it would be grossly unfair to change the rules in the middle of the game after we have invested so much time and expense in good faith reliance on the provisions of the Federal Power Act which permit meaningful competition for new licenses for existing hydroelectric facilities.

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[4] *City of Bountiful, Utah*, 11 F.E.R.C. ¶ 61,337 (1980).

[5] *Alabama Power Co.* v. *FERC*, 685 F.2d 1311 (11th Cir. 1982), *cert*. *denied*, 103 S. Ct. 3573 (1983).

III. S. 426 AND S. 403 WOULD ELIMINATE MEANINGFUL COMPETITION IN THE LICENSING OF EXISTING HYDROELECTRIC PROJECTS

I will not dircuss S. 426 and S. 403 in great detail. Mr. Radin and other witnesses have already expressed public power's strong opposition to both of their bills. SMUD shares their views. I would, however, like to comment briefly on a few of the most disturbing aspects of these proposed bills. In discussing these bills, it is important to consider the demonstrated benefits to the public which result from competition and the importance of the public preference in making this competition possible. To the extent that legislation eliminates the existing public preference and thereby discourages competition for new licenses for existing hydroelectric facilities or establishes a preference for existing licensees thereby precluding any such competition, we do not believe that it represents sound public policy.

A. S. 426

S. 426, the Wallop bill, would not only eliminate the preference in the licensing of existing hydroelectric projects, but would set up a process that would effectively bypass the competition provisions of the Federal Power Act and virtually guarantee reissuance of the license to the existing license holder. It would replace the present competitive process with a "sole-source" bidding procedure involving the existing licensee and no one else. Only in the unlikely event that the Commission determined that the existing licensee's proposal did not meet the minimum requirements of the Federal Power Act, or could not be amended to meet those requirements, would the Commission then consider an application submitted by another applicant. Under this procedure, a potential applicant with a superior plan would not necessarily even have its proposal considered by the Commission.

Under S. 426, consumer-owned utilities would have no incentive to compete for existing hydroelectric projects, and all of the power generation, energy efficiency and environmental benefits of competition that I have just described would be lost. In the case of the Rock Creek-Cresta Project discussed above, FERC may have accepted PGandE's contention that the resources were being used to their "full potential" and the process would have simply ended. Thus, the innovative improvements and public benefits which have emerged from the competitive "bidding" between SMUD-Cal Cities and PGandE would never have materialized.

Not only does the Wallop bill make it unlikely that anyone will be permitted to compete, the bill virtually guarantees that no consumer-owned utility will want to compete. S. 426 would change the compensation due a prior licensee in the unlikely event that a license changes hands from the existing "net investment" plus "severance damages" standard to a vague standard requiring the new licensee to pay "just compensation" as determined by the Commission "in accordance with due process of law." The change would greatly discourage competition by increasing substantially the amount of compensation.

The private utilities' request for just compensation (which they interpret to mean the replacement value of the facility) would not only drastically discourage competition, it is also both unreasonable and unnecessary. The companies have already been paid a fair, economic rate of return for their investment, and their customers have fully benefited from the low rates derived from licenses for these public resources. Although the market value of the projects at issue is usually well above the existing licensee's net investment, that value is attributable to the public resource, the falling water, which was never owned by the existing licensee but only leased -- rent free -- for the license term. There is no reason to pay the existing licensee for the appreciated value of an asset which they have leased, especially when the appreciation has resulted from developments unrelated to the actions of the licensee.

Moreover, there is no assurance in the bill that this "just compensation" windfall would be used to benefit the ratepayers of the private utility. Indeed, I understand that, in the past, private utilities have argued (sometimes successfully) that analogous lump sum receipts properly belong to the company and its shareholders and not to the customers. Certainly, there is no justification whatsoever for lining shareholder's pockets with a windfall based on a publicly owned resource.

B. S. 403

Although the substance of Senator Johnston's bill is considerably different from Senator Wallop's, I fear that its impact would be the same -- tilting the process so far in favor of the existing licensee that neither consumer-owned utilities nor anyone else would compete with the existing licensee.

S. 403 would repeal the existing public preference in relicensing proceedings and substitute a preference in favor of the existing licensee. As I have discussed, without the public preference, SMUD and other consumer-owned utilities would not commit the substantial amounts of time and money required to compete for an existing hydroelectric project. We need to have some reasonable chance of prevailing in order to undertake the enormous risks involved in competing with larger private utilities. By eliminating the existing public preference and adding a new preference for the exclusive benefit of the existing licensee, S. 403 virtually guarantees that there will be no competition for existing hydroelectric projects.

In addition, we fear that the economic standard proposed in S. 403 may be interpreted by FERC to favor the large private utilities holding licenses for hydroelectric projects. The vague economic standard in S. 403 could permit the Commission to take into account in licensing decisions the number of ratepayers of each utility, thereby almost always favoring larger private utility applicants over smaller consumer-owned utilities.

This "bigger is better" argument is enormously destructive of the fundamental principles underlying the Federal Power Act and our nation's electrical system. If hydroelectric licensing decisions turn simply on the number of customers served by the competing applicants, the largest applicant will always receive the license. This economic standard could be directly in conflict with our national policy of encouraging diversity and competition in the electric utility industry.

Moreover, to the extent that the "economic impact" standard contained in S. 403 is adopted from FERC's decision in the Merwin case,[6] it is unworkable, as a practical matter, and would also discourage competition for these projects. In Merwin, the Commission purported to evaluate the "economic impact" associated with allocating the benefits of the water resource to the customers of one applicant or the other by calculating the cost of alternative power for each of the applicants. For all practical purposes, however, the long-term cost of alternative power is the same for any entity within a region. Accordingly, proper application of the test on a long-term basis produces a "wash" and would reveal nothing except that competitive parties in the same region have the same long-term alternative power costs.

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[6] Pacific Power & Light Company, 25 FERC ¶ 61,052 (1983).

Even if short-term differential rate effects were applied -- a wholly inappropriate approach, since hydro licenses are long-term licenses and should be evaluated on a long-term basis -- using this standard to measure "economic impact" would produce results plainly at odds with sound public policy. Under such an approach, only those systems with high alternative costs (whether as a result of inefficiency, poor planning, geographic location or other factors) would be entitled to the project power. All other reasonably efficient systems -- whether public or private -- would be foreclosed. Moreover, if it were to use this definition of economic impact, the Commission could not properly limit its analysis to the immediate effect on the prospective licensees. The economic effects to be considered would have to include the effects which result from the pooled operations of the potential licensees. In most cases, such an analysis, properly made, would again produce a "wash," or would favor the public applicant. In Merwin, for example, issuance of the license to the publicly owned utility would have made inexpensive power from the Bonneville Power Administration available to others throughout the region, including the investor-owned utility's residential and agricultural customers.

Accordingly, insofar as the bill suggests, or allows, a narrow definition of "economic impact" it represents unsound legislative policy. Whether on equity or efficiency grounds, this proposal in Senator Johnston's bill, as written, could be seriously anticonsumer, an impact that I am sure is just the opposite of the Senator's intent.

In sum, either the preference for the existing licensee or the economic standard included in S. 403 could alone seriously discourage competition for existing hydroelectric projects. Together, these provisions would eliminate meaningful competition for existing projects and substitute a virtual guarantee in favor of the existing licensee.

While we oppose the provisions of S. 403, which I have discussed, we support Senator Johnston's decision to retain the compensation provision in existing law. We certainly share the Senator's concern that the "just compensation" provision in the Wallop bill could "snarl the relicensing process in endless litigation" and his "serious doubts about whether the provision is sound policy."[7]

IV. S. 1219 WOULD PROMOTE COMPETITION IN RELICENSING PROCEEDINGS, WHILE ADDRESSING THE MAJOR CONCERNS OF THE PRIVATE UTILITIES

Of the bills presently pending before the Subcommittee, the legislation (S. 1219) introduced by Senator Metzenbaum is clearly preferable.

The Metzenbaum bill would provide for meaningful competition in the licensing of existing hydroelectric projects. It would require FERC to award the new license for an existing hydroelectric project to the applicant whose plans are "best adapted" to the purpose of the Federal Power Act. The bill would also preserve the existing preference for a state or municipal applicant whose plans are as good as those of a private applicant.

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[7] 131 Cong. Rec. S. 1165, S. 1166 (Feb. 6, 1985).

This would provide adequate incentives for some consumer-owned utilities to commit the substantial resources necessary to compete with private utilities.

At the same time, S. 1219 addresses two of the major concerns which the private utilities have expressed about existing law.

First, private utilities have complained that the existing Federal Power Act is unfair because it provides states and municipalities with the final right to amend their license applications in order to match the applications of private utilities. In this way, consumer-owned utilities can create a "tie" and prevail under the public preference. The Metzenbaum bill eliminates in relicensing proceedings this final right of states and municipalities to amend their license applications. This is a major concession for consumer-owned utilities, and it will make it more difficult for us to compete. However, this change in existing law addresses the concern of the private utilities about the fairness of relicensing proceedings and assures that all applicants will have the same opportunity to amend their license application.

Second, private utilities have claimed that the loss of a license would adversely affect their ratepayers. Yet they have proposed a standard of compensation which, as I have discussed above, may only result in a windfall to the shareholders of the private utility. The Metzenbaum bill is the only bill which prescribes compensation in a form specifically designed to benefit the ratepayers of the existing licensee and to mitigate any possible adverse impact on rates in the event of a license transfer.

In addition to the present requirement that a new licensee pay the prior licensee its net investment in the project and severance damages, S. 1219 would require the new licensee to make available at cost to the customers of the prior licensee up to an average of 25 percent of the output of the project for the initial one-fifth of the license term (usually 6-10 years). This provision would ease the transition for the customers of the prior licensee and provide them with direct benefits from the hydro resource. We believe that this is a sounder legislative approach than providing a windfall to the shareholders of the prior licensee.

As I said at the outset of my statement, we would prefer that Congress not amend the Federal Power Act.

However, if Congress does decide to modify the Federal Power Act, we believe that under the Metzenbaum bill consumer-owned utilities will still have a fair opportunity to compete for new licenses for existing hydroelectric generating resources.

In addition, we support S. 1219 because it would tackle several longstanding problems in the electric utility industry. Specifically, it would provide for antitrust review by the Department of Justice and FERC during the relicensing process to ensure that an applicant's conduct has been in accordance with the antitrust laws. In addition, S. 1219 would authorize FERC to require a licensee, under specified circumstances, to provide transmission for "wheeling" of power on a fair and reasonable basis.

While Gordon Hoyt will discuss these provisions in more detail, I should stress that they are essential to SMUD and to preserving competition in the electric utility industry. Both provisions reflect sound legislative policy. Wheeling facilitates the regional distribution of surplus, low-cost power, thereby providing lower electric rates for all consumers. And antitrust review as part of the licensing process promotes healthy competition in the electric utility industry and guards against monopoly control over generating and transmission facilities.

PGandE retains an effective monopoly on the transmission grid in Northern California. Unless there is an effective check on any anticompetitive behavior by PGandE, consumer-owned utilities may not be able to transmit power to their service areas and provide the "yardstick competition" against which all utility customers can measure prices and services.

We also think that the provision in S. 1219 which precludes existing licensees from avoiding competition by refusing to transmit the power from a project to a new licensee is particularly important for competition. Unless SMUD can transmit the power from an existing hydroelectric project to its service area, it cannot compete effectively for the project.

The Metzenbuam bill is the one piece of legislation before this Subcommittee which takes into account the interests of all consumers, regardless of whether they are served by consumer-owned or private utility systems. By eliminating the consumer-owned utilities' final right to amend their license applications and providing for additional compensation to the ratepayers of the prior licensee in the event of a license transfer, the bill ensures that the interests of the ratepayers of the private utilities are appropriately considered. In addition, by preserving the public preference and providing for the possibility of competition for new licenses for existing projects, S. 1219 ensures that public water resources will be utilized according to their best potential, an outcome which benefits all consumers.

* * *

I have not yet had an opportunity to review in detail Senator Evans' bill (S. 1260), which was included in yesterday's Congressional Record. From my preliminary review, it appears that the bill contains provisions, including the retention of the existing public preference, which I support. My principal concern is with the economic criterion set forth in S. 1260. It looks only to whether there will be "economic impact upon customers served by the existing licensee if it fails to receive a new license." This one-sided standard does not consider the impact on the ratepayers served by the competing applicant if it fails to obtain the new license and it does not consider the impact of a license transfer on competition and diversity in the electric utility industry.

Under the economic criterion in the Evans bill, it is hard to fathom any circumstances in which the public applicant could win since every license transfer will have some impact on the customers served by the existing licensee. I am concerned that this one-sided standard could effectively guarantee perpetual licenses to existing licensees. If Congress requires FERC to consider the economic impacts of a license transfer, it should require, at the very least, that FERC take into account the impact on the ratepayers of the competing applicants if it fails to receive the new license, as well as the customers of the existing licensee, and the impact of potential license transfers on competition and diversity in the industry.

My comments on S. 1260 are necessarily preliminary, and I request the opportunity to supplement my written testimony on the Evans bill.

* * *

Again, I would like to thank you for the opportunity to appear before the Subcommittee. I would be happy to answer any questions.

Senator MURKOWSKI. Next. I was gone, so I guess it is Mr. Hoyt. Excuse me.

STATEMENT OF GORDON HOYT, GENERAL MANAGER, DEPARTMENT OF PUBLIC UTILITIES, CITY OF ANAHEIM, CA

Mr. HOYT. Thank you, Mr. Chairman. My name is Gordon Hoyt. I am here in my capacity as the general manager of the department of public utilities of the city of Anaheim, CA. I am also president of the American Public Power Association.

I would like to begin by thanking Senator Metzenbaum for introducing S. 1219. It preserves the most essential principles of current law—meaningful competition and public preference—and tackles a longstanding problem in the electric utility area, the anticompetitive practices of the private utilities.

The Wallop bill would effectively eliminate competition for new licenses for existing hydroelectric projects. This should not come as a surprise to anyone. After all, this is the intent of the private utilities, to eliminate competition in the relicensing process, thereby assuring themselves perpetual control over these valuable water resources.

Without competition and relicensing as provided in Senator Metzenbaum's bill and in the present law, the public will lose significant improvements in power production, environmental enhancement, and energy conservation, but this is only part of the picture.

The elimination of competition in hydrorelicensing will also have a crippling effect on the viability of small consumer-owned utilities such as the city of Anaheim. Just look at the Anaheim experience. We are struggling to obtain energy independence, and our customers must pay rates that are significantly higher than those charged by Southern California Edison Co.

In order to survive and to provide meaningful competition, we must obtain a measure of independent control over our energy supply. The ability to compete for our own generating resources such as hydrofacilities is an essential element of helping us establish that independence.

In an effort to prevent us from gaining this independence, the private utilities have claimed that if we are allowed to compete for new licenses for existing hydro facilities, the result will be billions of dollars in rate increases. Their claims not only ignore the benefits of the competitive process, but also significantly exaggerate the impact of license transfers.

Only a small percentage of the hydrolicenses held by private utilities have been or are likely to be the subject of renewal competition. PG&E customers in California of course could be affected by relicensing, but PG&E's estimates of the possible impact of potential license transfers are grossly and irresponsibly exaggerated. They are based on the totally erroneous assumption that PG&E would need to replace all of the power from these projects at inflated and unrealistic rates, but today most large utilities, including PG&E and Southern Cal Edison have an excess of power. Fred Mielke, PG&E's chairman, confirmed this surplus in a recent issue of Electrical Work which said, "When Diablo Canyon goes into full operation," says Mielke, "another problem is likely to develop: finding markets for what is likely to be an oversupply of electric power."

Moreover, if the competing public entities are successful, PG&E would simply no longer be required to provide them with bulk power and the demand on its overall system would be reduced. When these factors are added to the equation, the hypothetical impact of a license transfer on PG&E is lessened considerably.

For example, R.W. Beck and Associates, an economic consulting firm, estimated that in the unlikely event that PG&E were unsuccessful in all three of its pending competitive relicensing proceedings, the resulting rate impact on the customers would be no more than half a cent a day or 2 dollars per year. That report is a part of my full testimony.

The private utilities' efforts to preclude competition are not surprising to consumer-owned utilities. They have in this and other areas consistently abused their monopolistic statues and have attempted either to eliminate or cripple their publicly owned competitors.

For example, the private utilities have repeatedly denied consumer-owned utilities like Anaheim access to transmission facilities, thereby denying us the opportunity to obtain lower cost power from alternate sources. In a blatant effort to preclude competition in relicensing, PG&E has flatly stated that it would not transmit power from a hydroelectric project relicensed to a public entity other than PG&E.

The antitrust and wheeling provisions of Senator Metzenbaum's bill would provide an appropriate mechanism to address these problems. They would heighten the antitrust scrutiny to which the private utilities are subject and make it more difficult for the private utilities to deny arbitrarily public systems or any other systems access to generation and transmission facilities. These provisions must be considered as part of this debate over hydroelectric relicensing.

Thank you, Mr. Chairman, for this opportunity to present the views and concerns of the citizens of Anaheim, CA, on these important issues.

Senator MURKOWSKI. Thank you very much, Mr. Hoyt, and particularly as president of AP Power, the American Public Power Association.

[The prepared statement of Mr. Hoyt follows:]

BEFORE THE SUBCOMMITTEE ON WATER AND
POWER OF THE COMMITTEE ON ENERGY AND
NATURAL RESOURCES OF THE UNITED STATES SENATE

TESTIMONY OF GORDON HOYT
GENERAL MANAGER
DEPARTMENT OF PUBLIC UTILITIES
ANAHEIM, CALIFORNIA

Dated: June 11, 1985

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TESTIMONY OF GORDON HOYT,
GENERAL MANAGER
DEPARTMENT OF PUBLIC UTILITIES
ANAHEIM, CALIFORNIA

Mr. Chairman and Members of the Subcommittee, my name is Gordon Hoyt, and I am here today in my capacity as the General Manager of the Department of Public Utilities of the City of Anaheim, California. I am also President of the American Public Power Association. It is a pleasure to appear before you today to testify, based on Anaheim's experience, on the importance of preserving meaningful competition in hydroelectric relicensing.[1]

I would like to thank Senator Metzenbaum for introducing the Fair Competition in Hydroelectric Licensing Act (S. 1219). Although Anaheim believes the existing provisions of the Federal Power Act provde an appropriate framework for hydro relicensing, if Congress determines to alter that framework we believe that your bill proposes a fair and reasonable approach. It preserves the most important elements of existing law -- the competitive process and the public preference -- while addressing the major concerns raised by the private utilities, environmentalists and others. In addition, S. 1219 addresses a longstanding problem in the electric utility industry -- the anticompetitive practices of the private utilities.

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[1] Anaheim, together with the Sacramento Municipal Utility District ("SMUD"), the Northern California Power Agency ("NCPA") and the Cities of Azusa, Banning, Colton and Riverside, California, is currently competing with the Pacific Gas and Electric Company ("PGandE") for new licenses for the Rock Creek-Cresta and Haas-Kings River Hydroelectric Projects in California. The prior licenses for both projects were held by PGandE.

For the reasons discussed by Mrs. Taylor, we strongly oppose two other bills pending before the Subcommittee. Both the Wallop and Johnston bills (S. 426 and S. 403) would effectively eliminate competition in the licensing of existing hydroelectric projects and guarantee existing licensees perpetual licenses for the use of public resources. These bills should be troublesome to all consumers -- regardless of whether they are served by public or private utilities.

While I have not had an opportunity to fully review Senator Evans' bill (S. 1260), it appears to have many constructive and positive aspects, such as preservation of the existing public preference in relicensing, which I support, I have serious reservations, however, about the bill's economic criterion, which may work to guarantee perpetual licenses, I would request the opportunity to submit written comments on S. 1260 after this hearing.

I will first explain why the pending legislative proposals implicate both competition in the licensing of existing hydroelectric projects and, more broadly competition in the electric utility industry. I will then respond to several of the most inflamatory and inaccurate claims which have been made by the private companies against the pubic preference in relicensing, in particular, their inflated estimate of the economic impacts of relicensing on their ratepayers. Finally, I will discuss in some detail why the wheeling and antitrust provisions of the Metzenbaum bill are necessary to maintain and enhance competition in the industry and are essential if cities such as Anaheim are ever to achieve a measure of independence over their power supply.

I. THE PUBLIC PREFERENCE IS ESSENTIAL TO PRESERVING COMPETITION AND DIVERSITY IN THE ELECTRIC UTILITY INDUSTRY

The pending legislative proposals require the Subcommittee to focus its attention not only on competition in the licensing of existing hydroelectric projects but on the much broader issues of competition in the electric utility industry. These issues raise the most far-reaching and serious kinds of policy concerns respecting the competitive relationship between small consumer-owned power systems and their much larger private power counterparts.

The testimony by Mrs. Taylor and the other witnesses demonstrates that both S. 426 and S. 403 would effectively eliminate competition in the licensing of existing hydroelectric projects. Indeed, even the private utilities candidly (but privately) will admit this. And it should come to no one's surprise. After all, this is the intent of the legislation -- to avoid a licensing process which would place these facilities in any hands other than the existing license holders.

But the fundamental question for this Subcommittee and the Congress to address is whether the harmful effects of eliminating competition for hydro-relicensing outweigh the benefits to the private utilities. The record of these hearings offers convincing evidence that the harm, including the harm to private utility ratepayers, far outweighs the gains.

First, as Ann Taylor has eloquently shown, without competition, the public will lose significant improvements in output, environmental enhancement, and energy conservation at each hydro facility subject to relicensing. But that is only part of the picture, for the elimination of competition in hydro relicensing also will have a crippling effect on the viability of small publicly owned utilities such as the City of Anaheim.

Just look at the Anaheim experience. We are a small, consumer-owned utility struggling to obtain energy independence. We, and other municipal utilities in Southern California, are at the mercy of Southern California Edison for much of our power supply, and we have rates that are significantly higher than SCE's. Without a measure of independent control over our energy supply, we and our ratepayers are extremely vulnerable to changes in fuel costs and to arbitrary conduct by the private utilities we are forced to rely upon.

For years, Anaheim has struggled to achieve a measure of independence over its power supply.[2]

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[2] That independence, it should be noted, will not come inexpensively for Anaheim's citizens. By an overwhelming majority, the citizens have voted to finance over $1 billion -- or over $4,000 for every man, woman and child in the city -- for ownership interests in new generating and transmission resources that will help Anaheim to break free from the kind of high electricity prices they have experienced in the past. In this way, the citizens are hoping to get some control over their power supply and reduce dependence on the private utilities.

We have been forced, because of the many delays in acquiring alternative power supplies, to purchase resources that are less attractive economically than we might otherwise have been able to acquire. In no small measure, these delays can be traced to the private utilities in California. By a combination of refusals and contracts that required us to remain their customers for periods of ten years at a time, they effectively precluded Anaheim and other public systems from gradually purchasing our own generation resources sooner and at a more economic rate.

Nevertheless, we are almost there. What we still need in order to achieve an economic power supply is access to an integrated transmission grid that will enable us, like other utilities, to take advantage of differentials in energy prices so that we can constantly purchase the least-cost energy for our customers. In addition, we need access to non-interruptible transmission so that we can make decisions about additional capacity without the threat of yet another transmission refusal by the private utilities which presently control transmission lines. Finally, we need an economic source of power to satisfy demands during peak hours of the day.

Hydroelectric resources, such as the Rock Creek-Cresta and Haas-Kings River Projects, for which we are currently competing, are exactly the kind of supplementary "peaking" power that Anaheim needs. Yet we are now faced with these proposals to eliminate our right to compete -- after we have spent a considerable amount of the City's funds on the costly engineering and environmental studies necessary to prepare license applications for the Rock Creek-Cresta and Haas-Kings Projects in good faith reliance on existing laws. If we are to retain the benefits of competition and diversity in the electric utility industry, it is essential that consumer-owned utilities such as Anaheim have a reasonable opportunity to obtain licenses for some of these hydroelectric generating resources.

Elimination of competition is not fair to the citizens of Anaheim. But, in the long run, it also harms the interests of the private utility ratepayers. Public power systems, like the one we have in Anaheim, serve a most important function in our nation's system of generating and distributing electric power. We provide a strong, competitive element in an industry not otherwise subject to competition. In the present efforts of the private utilities to repeal the existing preference for municipalities in hydroelectric relicensing, we in public power see again -- as we have before in many other contexts -- a campaign by the private sector of our industry to reduce or eliminate competition.

The existing public preference, as enacted by Congress in 1920, was intended to allow fair competition for hydroelectric projects. But the hydro relicensing preference also has a broader purpose. It serves as a part of a fundamental and longstanding federal policy -- reaffirmed in a multitude of statutes since 1920 -- to promote the development of a viable public power sector.

To the extent that hydroelectric projects are, in fact, licensed to public bodies, the preference policy promotes a more competitive electric utility industry, with resulting benefits to all consumers. We provide a competitive "yardstick" against which the performance of the private monopolies can be measured, and as a manager of PGandE's East Bay Division recently conceded, public entities force the private companies to operate more efficiently and economically.

> "This [competition from municipally owned utilities] is real tough competition. It is a threat. The only way we can combat it is to increase the efficiency of our operation, and to provide our

> customers with the best possible utility service."

Why are the private utilities constantly looking over their shoulders at the performance of the neighboring publics? The reason is simple. Public utility regulators are able to use the performance of publicly owned utilities to help determine the legitimacy of rate increases sought by the privates. Even more importantly, however, private utilities know that a viable public sector gives their ratepayers a real alternative to which to turn if the private utility's performance is inadequate.

This is why viable public utilities are essential, and it helps explain why the private utilities are so bent on undermining our ability to compete. Ironically, the ultimate victims if they succeed will be the ratepayers of the private utilities. Their ratepayers would lose an important check on the performance of the private utilities and, in the event of poor performance and excessive rates, would have nowhere else to turn.

II. THE PRIVATE COMPANIES' ARGUMENTS AGAINST THE PUBLIC PREFERENCE AND COMPETITION ARE MISLEADING AND WITHOUT MERIT

The private companies have raised a number of arguments against the competitive relicensing process. Although I will not attempt to respond in detail to all of their arguments, several of the claims merit specific rebuttal.

A. The Threat of Massive Rate Increases

The private companies claim that, unless the Wallop bill is enacted, there will be a "nationwide crisis" for electricity consumers who will be faced with billions of dollars of rate increases. Their threats not only ignore the benefits of the competitive process but are irresponsibly exaggerated and misleading.

1. Hydro Relicensing Will Have Minimal Impacts Nationwide

First, hydro relicensing would have very little, if any, impact on electric rates. For the vast majority of electric utilities and their customers, public preference will have no impact and is of no interest whatsoever. Indeed, two-thirds of the private utilities have little or no hydro in their load mix. In addition, the hydropower controlled by private utilities accounts for only a small amount of the total power generated by these utilities. Currently, only 2.68 percent of total private power generating capacity is from hydroelectric projects under federal licenses.

Furthermore, only a small percentage of the licenses held by private utilities have been or are likely to be the subject of license renewal competition between consumer-owned and private utilities. Since 1978, approximately 130 relicensing cases have come before FERC, but only 11 involve competition between consumer-owned and private utilities.

To date, not a single hydroelectric project has been transferred from a private utility to a public utility in relicensing competition. In fact, in the only public-private relicensing proceeding which has been decided by FERC, the new license was awarded to the existing _private_ licensee.

The misleading statistics offered by the private utilities have been engineered to suggest that almost every hydroelectric project will change hands upon the expiration of the present license if the Federal Power Act is not amended. Yet the facts suggest the opposite conclusion. There is no reason to think that more than a small percentage of hydroelectric projects will be subject to competition or that more than a few will change hands. Thus, notwithstanding the doomsday rhetoric of the other side, relicensing will have little impact nationwide.

2. The Impacts of Relicensing Competition Will be Minimal Even for PGandE, the Utility Most Directly Impacted

PGandE customers in California, of course, could be affected by relicensing. But PGandE's estimates of the cost impact of relicensing these facilities to consumer-owned systems are grossly -- and irresponsibly -- exaggerated.

For instance, in a brochure dated December 1983 titled "Hydroelectric Takeover Attempts -- A Perspective," PGandE estimates that its customers will pay nearly $139 million annually if the Rock Creek-Cresta, Haas-Kings River and Mokelumne Projects are not licensed again to PGandE, a figure which translates to $40 per PGandE customer per year. PGandE reaches that total by multiplying the average annual energy produced at the facilities by the cost of fuel to produce the same average annual energy. That computation, however, is based on the totally erroneous assumption that PGandE would need to replace all of the power from the projects by constructing new generating facilities. There are at least three important reasons why this assumption is wrong.

First, today most large utilities -- including PGandE and Southern California Edison -- have an excess of generation resources. PGandE's reserve margin will increase even more when its Diablo Canyon Nuclear Power Plant comes on line fully and its Helms Pumped Storage Project becomes fully operational. Indeed, Mr. Mielke, PGandE's Chairman, in an article in the January 1985 issue of Electrical World saw this surplus as the key issue for PGandE this year:

> "When Diablo Canyon goes into full operation, says Mielke, another problem is likely to develop -- finding markets for what is likely to be an oversupply of electric power."

Mielke's admission simply confirms what we have been saying for years -- PGandE will not need to construct new plants if a few of its 66 hydroelectric projects are licensed to consumer-owned utilities.

Second, PGandE's computation fails to reflect the fact of bulk power sales to the consumer-owned systems competing for the PGandE projects. PGandE currently sells considerable excess energy to the very entities that are now competing for its licenses. If a project did change hands, PGandE would no longer be required to provide bulk power to the public entities which obtained the license, and the demand on its overall energy system would be reduced. PGandE would not need to replace the power it now sells to these wholesale customers.

Third, the computation also does not reflect PGandE's annual savings in the operating and capital costs of these facilities.

When these factors are added to the equation, the hypothetical impact of a license transfer on PGandE's ratepayers is lessened considerably. Several recent studies support this conclusion. For example, R.W. Beck & Associates, an economic consulting firm, conducted a detailed study of the potential impact on PGandE and its customers if it lost all three pending relicensing proceedings. Based on the assumptions most favorable to PGandE, Beck concluded that the annual increased cost to PGandE would be no more than $18 million annually -- a figure which is probably significantly exaggerated because it assumes PGandE would replace this power with the most costly alternative. The Beck study also estimated that the total increase in rates would be about 1/2 cent per day -- or less than $2 per year -- for the average PGandE residential customer.[3] That figure should be compared to the estimated increase of $60-$80 a year for the average customer resulting from PGandE's cost overruns on its Helms Pumped Storage Project and its Diablo Canyon Nuclear Power Plant.

I would also recommend to the Subcommittee the extensive analysis of the economics of hydro relicensing which was published by the Consumer Energy Council of America ("CECA") in 1984. The CECA study examined the economic arguments advanced by the private utilities, and concluded that, for the vast majority of customers of private utilities, relicensing would have absolutely no impact on their ratepayers. The study also concluded that, for the worst case scenario of PGandE, which has the largest number of projects subject to contested relicensing proceedings, the cost to its customers in the unlikely event that it lost all of the pending competitions would be less than 1 cent per day per customer, and no new facilities would have to be built. This is consistent with the conclusions reached in the Beck study.

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[3] I have attached a copy of the Beck study to my testimony.

This question of rates must be placed into overall perspective. If PGandE or any other existing licensee lost a plant under catastrophic circumstances, e.g., a storm or a rockslide, the rates of that company would not likely immediately reflect an increase. Instead, the utility would adjust its resources to see if its operations could be changed in some way to avoid a rate increase. At a minimum, it would contact its other neighboring utilities to see if additional energy sources were available. And it would incorporate changes in its future plans to try to adjust for the loss of the particular plant. If PGandE were to lose one or more of the hydroelectric projects at issue, its management would surely make such efforts to reduce the rate impacts on its customers.

3. Any Impacts on the Customers of the Existing Licensee Must Be Balanced Against the Benefits of Competition

The possibility of nominal adverse impacts on customers of PGandE and other private utilities is outweighed by the overwhelming beneficial impact of the competition for these projects. As Mrs. Taylor described, the competitive process has caused an increase in the hydro capacity at the Rock Creek-Cresta and the

Haas-Kings River Projects alone of at least 83,200 kilowatts, or 22 percent, even if PGandE obtains the license. If, as a result of the threat of competition, all of PGandE's hydro capacity were increased by 22 percent, or a total of about 528,000 kilowatts, all of the consumers in California would benefit. Moreover, PGandE's customers would benefit additionally from the lower energy costs associated with the expanded hydro resources. On a national level, if all hydro projects were expanded in a similar fashion, the rate-reduction impact of competition could be truly significant.

Moreover, any impact of a license transfer on the rates of a private utility should also be considered in the context of the significant benefits to the customers of the competing consumer-owned utilities. The consumer-owned utilities competing for the Rock Creek-Cresta and Haas-Kings River Projects include the Southern California Cities of Anaheim, Azusa, Banning, Colton, and Riverside. These cities hold no hydroelectric licenses of their own and historically have been dependent on Southern California Edison for generating resources and for transmission of power. Customers of all of these cities pay rates significantly higher than those paid by Edison's customers. Azusa's rates are up to

34 percent higher than Edison's; Banning's are 40 percent higher; Colton's are 23 percent higher; and Anaheim's customers pay approximately 4 percent more than Edison's customers.

If Anaheim and the other consumer-owned utilities are awarded the licenses for the Haas-Kings River and Rock Creek-Cresta Projects, the City of Anaheim would receive 20.38 percent of the low-cost hydropower generated by the projects. I can tell you that access to these projects would have a tremendous impact on the ratepayers of Anaheim in helping them redress the imbalance between their rates and their neighbors' and to gain some measure of independence in generating their own power. These projects could result in annual savings to our ratepayers of approximately $20 million per year.

Finally, it should be observed that, to the extent that there is any impact on the rates of an existing private licensee caused by the transfer of a license, the Metzenbaum bill would assure the customers of the prior licensee access to an average of 25 percent of the power from the project at cost for the first 6-10 years of the new license term. This would ease the transition and minimize any impacts on the customers of the prior licensee.

B. The Threat of Disrupting Coordination of the Riverway

One of the most misleading contentions of the private companies is their argument that coordinated waterway operations will be disrupted by a transfer of an existing hydro project. In other words, if a company already controls a waterway through licenses for multiple projects, this argument, in effect, is a contention that the law should mandate that the same company be given the exclusive rights to the power and water potential on the whole waterway.

There is, however, nothing unusual about multiple ownership of hydro projects on the same river system. Mixed ownership on a single waterway is common throughout the nation's large waterways. Indeed, the right of the existing licensee to operate on the river now is premised on coordination of its projects with other licensed projects.

As a related matter, the private companies argue that because they are experienced and efficient, and have operated these projects in a satisfactory fashion, there is no basis for transferring the projects. But the fact that they have been adequate stewards in managing these resources should not entitle them to an automatic license renewal. Good stewardship should be the minimum requirement for access to these extremely valuable and limited public resources. It does not justify granting exclusive and perpetual control over highly valuable resources. Furthermore, the anti-competitive behavior that I describe below casts serious doubts on at least PGandE's claim of "good stewardship."

Moreover, let me assure you that Anaheim, SMUD, NCPA and the other Southern California Cities are fully capable of efficiently and competently operating these facilities. Indeed, I believe we would do a better job. In our judgment, PGandE has not developed these facilities to their maximum potential, a conclusion supported by the improvements we proposed in the relicensing competitions. These projects, while comprising only about three percent of PGandE's generating capacity, would provide us and our co-applicants with enough power to free us of the need to make wholesale purchases from PGandE and Southern California Edison.

C. The "Bigger Is Better" Argument

The private companies also argue that they are larger and serve more customers than consumer-owned utilities and that they are, therefore, entitled to inexpensive hydroelectric power. Of all the arguments involved in this controversy, none would so destructively affect fundamental principles underlying our nation's electricity system as this one. The implications of this argument are enormous. If correct, it would require a repeal of all public preference laws. If hydroelectric licensing decisions were based simply upon the number of customers served by the competing applicants, the largest applicant would always receive the licenses. The result would be that most, if not all, of the desirable hydroelectric projects would be licensed to the the large private companies. Such a concentration of electric generating resources in the hands of a few, private, profit-making companies would dangerously undermine the little competition that exists in our industry.

In sum, the claims of the private companies as to rate impacts are grossly exaggerated, rest upon unrealistic assumptions and ignore entirely the many consumer benefits of a competitive relicensing process. At the same time, both the private companies' allegations as to disruption of coordination and their "bigger is better" argument are, in reality, little more than rationalizations for the underlying claim of a permanent right to the licenses at issue. If the members of this Subcommittee, and their colleagues in the Congress, subject these various theories to any scrutiny at all, I am confident that they will conclude -- as I have -- that acceptance of such claims as a basis for legislative policy would be the most serious kind of mistake.

III. THE ANTITRUST AND WHEELING PROVISIONS OF S. 1219 WOULD PROMOTE COMPETITION IN THE ELECTRIC UTILITY INDUSTRY AND BENEFIT ALL CONSUMERS

It has been demonstrated that competition for new licenses for existing hydroelectric projects results in the significant improvement of the projects themselves and, equally important, that, should some consumer-owned systems obtain the new licenses for these projects, the competitive position of public power would be strengthened to the benefit of all consumers. But much more is needed. As I have suggested above, the private utilities have consistently abused their monopolistic status and have attempted either to eliminate or cripple their publicly owned competitors.

The antitrust and wheeling provisions included in the bill introduced by Congressman Metzenbaum would lessen this competitive imbalance. By describing some of the history of the public-private power relationship in California -- particularly in Anaheim -- I will try to show why such legislation is so important.

A. The Present Competitive Inequality in California

Since 1920, when the Federal Power Act was passed, private utilities have, through mergers and consolidations, centralized their economic power. In 1920, there were about 4,000 private electric companies. There are only about 200 operating today. These companies have vast generating and transmission resources.

In contrast, there are more than 2,200 publicly owned utilities. Most are much smaller than the private utilities, and many have no generating capacity of their own. The total generating capacity of municipally owned utilities is only a small fraction of that of the private companies.

The situation in California is consistent with the general pattern of competitive imbalance. PGandE holds licenses for 66 hydroelectric projects with a total capacity of 2,370,000 kilowatts. Its total generating resources will exceed 15,000,000 kilowatts when its Diablo Canyon Nuclear Power Plant and Helms

Pumped Storage Project become fully operational. In 1983, PGandE's gross revenues totalled $6.6 billion, and its total assets exeeeded $14.7 billion. Similarly, Southern California Edison ("Edison") has total generating resources of 12,800,000 kilowatts. Included among these resources are current licenses for 37 hydroelectric projects with a total capacity of 780,000 kilowatts. Edison made profits of $555.7 million in 1982 on gross revenues of $4.3 billion. Its assets total over $10 billion.

Competing against these two private giants is a diverse group of publicly owned utilities which have limited generating resources and no independent transmission facilities.

NCPA's sole existing generating resource is a recently completed geothermal plant with a capacity of 110,000 kilowatts, which is currently being doubled in size. The remainder of the power utilized by NCPA members is obtained through bulk power purchases.

Anaheim, which has one of the oldest municipally owned systems in California, sells electricity to approximately 99,000 customers located in an approximately 43-square-mile service territory. We presently have an ownership interest in 69,520 kilowatts of San Onofre Nuclear Generating Station Units 2 and 3, a multiple-ownership nuclear plant, which supplies about 15 percent of our power needs. We also purchase a small amount of interruptible or non-firm energy from a few sources. The remainder of our power needs are supplied by Edison.

The other Southern California cities involved in the licensing cases -- Azusa, Banning, Colton and Riverside -- are smaller. Like Anaheim, they have been dependent, historically, on Edison for electric service. Even today, they lack adequate independent generation resources and access to meaningful transmission.

Increased concentration in the industry is not the only reason the pro-competitive aspects of the Federal Power Act are essential. In addition, the private utilities have consistently abused their monopolistic status and have attempted either to eliminate or cripple their consumer-owned competitors.

In light of this behavior, additional methods must be established to curb this anti-competitive behavior and to maintain and further promote competition in the industry.

The antitrust and wheeling provisions of Senator Metzenbaum's bill would provide such a mechanism. They would heighten the antitrust scrutiny to which the private utilities are subject and make it more difficult for the private utilities arbitrarily to deny public systems, or any other systems, access to generation and transmission facilities. These provisions are an essential part of this debate over hydroelectric relicensing.

By providing some history and description of the public-private power relationship in California -- particularly in Anaheim -- I will try to show why such legislation is so important.

B. Anticompetitive Practices of the Private Utilities: The Anaheim Experience

We have struggled for years in Anaheim to obtain independent sources of power. In 1970, Edison and San Diego Gas & Electric filed a license application with the old Atomic Energy Commission to build the San Onofre Nuclear Power Plant. Under section 105 of the Atomic Energy Act, Edison was subject to an antitrust review as part of the licensing process. We were permitted to intervene in the licensing proceedings and consult with the Department of Justice. In 1972, Anaheim withdrew its opposition in the proceedings and entered into settlement negotiations which resolved certain matters. As a result, Anaheim received an ownership interest in San Onofre Units 2 and 3. We also gained access to Edison's transmission system.

Our ability to gain a share of San Onofre and access to Edison's transmission system has changed our power supply picture considerably. We anticipate that Anaheim could itself supply about 70 percent of its demand and energy requirements by 1988, assuming that we are successful in winning the licenses for the Rock Creek-Cresta and the Haas-Kings River Projects. In addition to our participation in the Intermountain Power Project -- which, I should note, will not only benefit Anaheim but will also benefit Edison and its customers --* our power supply will consist principally of our interest in the San Onofre Units 2 and 3, an allotment of power from Hoover Dam and the two hydroelectric projects.

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* The Intermountain Power Project, which alone represents an investment of over $800 million for Anaheim, consists of coal-fired units located in Utah and a transmission system from Utah to Southern Calironia. In light of our participation in the project, Edison will not have to finance additional new and expensive generation in order to supply the Anaheim load served by IPP. Instead, its customers can enjoy the lower costs associated with the existing Edison plant, and Edison can defer constructing additional generation. Moreover, there are also the lower costs to the Edison customers associated with plant retirements that Edison can make once it is freed of the necessity to serve the Anaheim load as well as the incremental energy costs associated with serving Anaheim.

Our experience with Edison and the San Onofre nuclear plant is not atypical. The California private utilities have refused to cooperate in, and indeed have actively interfered with, the development of independent, consumer-owned utility systems, however small. The experience of Anaheim and the other Southern California Cities, with which I am closely familiar, has, to say the least, been frustrating. Where antitrust review has not been available, Anaheim has had to initiate and pursue other legal actions, including an antitrust suit against Edison in federal district court and a separate, federal proceeding against the private utilities in California before FERC, in order to gain access to alternative power sources and transmission lines.

The importance of transmission access to Anaheim and the other Southern Cities cannot be overemphasized. If access to transmission is barred, we are in effect captives of Edison since it solely controls all of the transmission lines out of our individual systems. Nevertheless, Anaheim and the other Southern Cities have made repeated, unsuccessful efforts in the past to secure additional bulk power supplies. We sought to purchase capacity and energy from the Pacific Northwest, but were precluded by Edison, which together with PGandE and San Diego control transmission from the Pacific Northwest. When we sought to participate in the Navajo unit, a large coal-fired plant located in Arizona, we were barred from participation because Edison refused to provide necessary transmission from the California-Nevada border to Anaheim, over the Edison transmission network.

Later, Anaheim expressed an interest in participating in the proposed coal-fueled Henry Allen-Warner Valley Project. This project was to be managed by Nevada Power Company and to be jointly owned by Nevada Power Company, Edison and PGandE. We asked Nevada for participation in the project. Nevada told us that Edison was responsible for approving participation for the consumer-owned utilities in its service territory. We asked Edison if we could participate, and it said that we had to make all such requests to Nevada. Totally frustrated, we sent a letter to all the existing participants. The letter accomplished nothing, and our participation was effectively denied.

Anaheim and other public systems then tried to participate in PGandE's proposed Stanislaus Nuclear Generation Project. PGandE rejected our efforts, as it did other requests for participation in its nuclear projects. However, as a result of the nuclear project antitrust review invoked for the proposed Stanislaus Project and made applicable also to the Diablo Canyon Nuclear Power Plant, procedures required by the Atomic Energy Act and the Department of Justice's involvement, consumer-owned utilities were able to obtain limited transmission benefits that they would not otherwise have been able to acquire.

The experience of the public systems throughout California with PGandE and Edison, with whom they must deal directly, is the focus of litigation currently pending before FERC.[8] In these consolidated proceedings, a host of issues were raised, including the refusal of PGandE to enter into any reasonable transmission agreement with the public entities and its outright refusal to transmit power from any former PGandE hydroelectric project relicensed to a competing applicant.

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[8] Pacific Gas and Electric Company, FERC Docket Nos. E-7777, P-2735, P-1988-003, and P-233-006.

In 1979, Anaheim asked Edison to provide firm transmission for 150,000 kilowatts of non-interruptible power from the Cholla Generating Projects being built by the Arizona Public Service Company. We could not complete the purchase because Edison refused to allow Anaheim credit for Cholla capacity until the mid-1980s. Nevertheless, Edison purchased for itself the very power that we were seeking from the Cholla plant.

Similarly, whenever we have tried to purchase electric energy from the Pacific Northwest, we have found our access barred by the private utilities' controlling transmission service over the Pacific Northwest-Southwest Intertie facilities. We executed a contract with the Bonneville Power Administration ("BPA") for the purchase of both surplus and provisional energy; then we entered into a contract with the State of California, under which it assigned a portion of its rights to transmission over the Intertie facilities to Anaheim. Edison, however, characterized Anaheim's contract with California as a "nullity" and refused to permit transmission services. Edison also refused to provide firm transmission over its share of the Intertie. As a result, we have been unable to purchase any power from BPA.

Another vivid example of Edison's unwillingness to coordinate its planning, except on its own terms, was demonstrated by its refusal to coordinate the development of its Balsam Meadow Hydroelectric Project with Anaheim and other consumer-owned electric systems in Southern California. The Balsam Meadow Project is a new project that would add approximately 200,000 kilowatts of hydro capacity for peaking purposes. This power, although very expensive, is critical to systems in Southern California where peak demands can occur quickly, leading to the need for resources which respond quickly to load changes.

Edison, which has a license for certain of the project works, applied for a preliminary permit to study the project. Anaheim and Riverside sought a competing preliminary permit to construct the project and offered to make available the output of the project, if it were to receive a license, to all interested electric systems, public and private, in Southern California. In the alternative, we requested FERC to order Edison to make at least a portion of the project available to all interested electric systems in Southern California. Edison adamantly refused and threatened to use its existing license to bar the issuance of a preliminary permit to the Cities. Edison refused to consent to the use of certain project works licensed to Edison (for which it would be fully compensated) if the Cities, rather than it, were permitted to develop the project.

Our experience with the Balsam Meadow Project epitomizes, I believe, the difference in attitudes of the public and private entities. Had Anaheim been made the licensee, we would not have refused to cooperate or coordinate our operations with another system that wanted to propose a nonconflicting use of our project.

* * *

Our experiences are not atypical of the kinds of anticompetitive practices in which the private utilities engage. NCPA, SMUD and other public bodies in California have encountered similar obstinacy based on monopoly control as they have tried to obtain fair treatment and service

There is no justification for these anticompetitive practices. The private utilities have had spare transmission capacity, and Anaheim, as well as the other consumer-owned systems, have always offered to pay reasonable prices for these services. The reason for withholding these services appears not to be reasonable compensation, but rather an absolute unwillingness to cooperate with the consumer-owned systems. The private utilities see us as competitors or rivals, and in response to our requests, they, at the most, satisfy the absolute minimum legal requirements. They are not subjected, under the current law, to antitrust scrutiny during a hydro relicensing proceeding, and there is no opportunity for review of the competitive effects of a relicensing by the antitrust experts at the Department of Justice. Thus, the private utilities never offer to share these valuable hydroelectric resources with us. Similarly, they are not required to provide us with transmission services. Our requests for such services are routinely rejected. These are the reasons we need passage of the Metzenbaum bill.

C. Antitrust Review

I have already described how the antitrust review procedure in the Atomic Energy Act enabled us to participate in ownership of a portion of the San Onofre Nuclear Power Plant. Congress, in enacting the Atomic Energy Act, recognized that the nuclear industry was once a government monoply, and, as such, is the product of past public expenditures for technological development. As the Nuclear Regulatory Commission has noted, "it was the intent of Congress that the original public control should not be permitted to develop into a private monopoly via the AEC licensing process, and that access to nuclear facilities be as widespread as possible."[6] Thus, as courts have repeatedly affirmed, the antitrust review procedure exists to ensure that the public as a whole reaps the benefits of nuclear technology. The Nuclear Regulatory Commission is required to rescind or refuse to issue a license if the activity sought to be licensed would "create or maintain a situation inconsistent with the antitrust laws." Under that provision, the NRC makes a broad-ranging, comprehensive review of the applicant's business activities to determine whether they have been, or will be, anticompetitive. The Department of Justice provides assistance in conducting that review.

The Metzenbaum bill would require a similar antitrust review as part of hydroelectric relicensing proceedings. Just as Congress determined that small electric power systems should not be precluded from the benefits of the peaceful use of atomic energy because only the largest utility systems could finance such plants, so too should Congress confirm that small systems should not be denied the benefits of public hydroelectric power merely because the large systems had the money to build hydroelectric projects decades ago, when the small systems did not, and, therefore, gained initial control of the best sites. Both nuclear power and hydropower are valuable public resources. While private companies should not be precluded from using such resources, their use, at a minimum, should be conditioned on compliance with the antitrust laws and upon affording reasonable and competitive access to the resources to others. The Metzenbaum bill would provide a mechanism for helping to ensure that companies using public resources also comply with applicable legal requirements and do not use the resources to maintain or establish anticompetitive situations.

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[6] Louisiana Power & Light Company (Waterford Steam Electric Generating Station Unit 3), 6 AEC 619, 620 (1973).

As I understand it, section 5 of S. 1219 would require formal consideration by the Department of Justice and FERC of the antitrust implications of any application for a new license for an existing project under section 15 of the Federal Power Act. Thus, the bill would ensure consideration of the competitive consequences of relicensing and, in appropriate circumstances, could enable consumer-owned utilities to obtain access to the power produced from hydroelectric projects. Moreover, under the legislation, FERC could condition the grant of a license upon the elimination of anticompetitive behavior by the private utility seeking the license. For instance, if PGandE receives the new license for the Haas-Kings River or the Rock Creek-Cresta Project, the license could require PGandE to provide us with transmission facilities for Pacific Northwest power. Such legislation is certainly in the public interest and, in my view, should be passed by Congress.

D. Wheeling Provisions

I have already commented at some length on the difficulties we have encountered in California in obtaining transmission services from the private utilities. The Metzenbaum bill would address this problem.

FERC has taken a very narrow view of its authority, under current law, to order the wheeling of power from one utility to another. The Metzenbaum legislation expands this authority. It would require the Commission to include in all new licenses for hydroelectric projects a condition requiring the new licensee to wheel electricity on fair and nondiscriminatory terms to other electric utilities. In addition, the bill would preclude existing licensees from avoiding competition by refusing to transmit the power from a project to a new licensee. This provision is necessary to permit smaller utilities, which may lack access to extensive transmission facilities, to compete effectively for hydroelectric projects.

The legislation makes eminent sense from the standpoint of national energy policy. The Department of Energy has reported that facilitating regional transfers of electricity could reduce substantial electric utility plant investment and energy costs, with corresponding reductions in rates for all electric consumers. DOE has identified lack of transmission access as a key to resolving this national problem. The savings in long-term capital investment alone, as a result of making transmission services available, warrant prompt attention by Congress.

Utilities are granted special eminent domain powers for construction of transmission lines. The public, therefore, has a strong interest in making sure that these powers are not abused in promotion of monopolistic practices. Control of transmission lines can be employed to kill or cripple competing utilities.

In light of the efforts of the private utilities to repeal the public preference and to deny the benefits to consumers generally of more assured access to transmission, it is essential that this long overdue amendment to the Federal Power Act be enacted.

IV. CONCLUSION

The sponsors of S. 426 have called the bill a "consumer protection act." However, because the bill would effectively eliminate competition for new licenses for existing hydroelectric projects, it would adversely affect, not benefit, all consumers. This is why the Consumer Federation of America and other leading consumer groups oppose S. 426 and its counterpart in the House. While S. 403 is less obviously anticompetitive, it would also seriously diminish the likelihood of the filing of competitive applications for these projects.

A preference for states and municipalities in relicensing, in my view, is essential to the maintenance of viable and beneficial competition, both in the licensing process and as between public and private power systems. I urge rejection of the present attempts to eliminate the preference.

At the same time, I strongly urge the passage of legislation that would tackle a longstanding problem in the electric utility industry -- anticompetitive practices of the private utilities. The antitrust and wheeling provisions of the Metzenbaum bill would make it possible for consumer-owned utilities to compete on a sounder footing and provide the nation's electric consumers with the lower-cost electric system they deserve.

REPORT TO

SACRAMENTO MUNICIPAL UTILITY DISTRICT
NORTHERN CALIFORNIA POWER AGENCY
CITIES OF ANAHEIM, AZUSA, BANNING, COLTON AND RIVERSIDE, CALIFORNIA

IMPACT OF RELICENSING OF ROCK CREEK-CRESTA, HAAS-KINGS AND MOKELUMNE HYDROELECTRIC PROJECTS TO COMPETING APPLICANTS ON PACIFIC GAS AND ELECTRIC COMPANY'S COSTS

R. W. BECK AND ASSOCIATES

MAY 1984
REV. JUNE 1984

OUTLINE OF REPORT

IMPACT OF RELICENSING OF ROCK CREEK-CRESTA, HAAS-KINGS AND MOKELUMNE HYDROELECTRIC PROJECTS TO COMPETING APPLICANTS ON PACIFIC GAS AND ELECTRIC COMPANY'S COSTS

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Introduction

The following report is an elaboration of an R. W. Beck and Associates internal study prepared in early May, 1984. The earlier study was done on an economic analysis of the impact of the relicensing of the Rock Creek-Cresta, Haas-Kings and Mokelumne Hydroelectric Projects to competing applicants on the costs of Pacific Gas and Electric Company (PGandE). The analysis was prepared to provide information for use by Gordon Hoyt, Public Utilities Manager of the City of Anaheim, California, in preparing testimony for presentation at a hearing before the Subcommittee on Energy Conservation and Power of the Committee on Energy and Commerce of the U.S. House of Representatives.

The results of our computations were made available to Mr. Hoyt. However, no explanatory text was prepared describing in detail the assumptions or methods of analysis. We have subsequently prepared this report to explain the methods by which we arrived at the results of our analysis, specifically that the relicensing of the three hydroelectric projects would result in a net increase of approximately $18.3 million in PGandE's annual costs.

In the course of preparing this report, we have reorganized the calculations to make them easier to follow. This analysis is intended to cover the costs of the transfer to the existing licensee. This approach is thus one which recognizes the decrease in costs experienced by PGandE's customers as well as fuel-related costs and is consistent with, but more accurate than those set forth in the Edison Electric Institute's Report: The Benefits to Consumers From Hydroelectric Projects Operated by Investor-Owned Utilities ("EEI Report").

Scope of Analysis and Summary

Four analyses have been made. The first was to determine the impact on PGandE's costs of relicensing the three hydro projects to the competing applicants. The other analyses were to determine the impact on PGandE's costs of the overruns on the Diablo and Helms Creek projects. Specifically, the four cases are as follows:

Case 1: Impact of relicensing of three hydro projects to competing applicants.

Case 2: Impact of the addition of Diablo and Helms Creek upon PGandE costs.

Case 3: Impact of the difference between actual and 1968 estimated costs for Diablo and Helms Creek.

Case 4: Impact of the difference between actual costs and 1978 estimated costs for Diablo and Helms Creek.

The purpose of this report is to explain the assumptions and calculations behind each case and place the final results in their proper prospective.

Based on our calculations, the net increase in PGandE costs as a result of the relicensing of the three projects to the competing applicants would be $18,314,771. This results in an increase in PGandE's costs of $1.92 per year to supply the average customer, or an average of approximately 1/2 cent per day.

The cost increase is insignificant as compared with the increase in PGandE's costs resulting from cost overruns on Diablo and Helms Creek. PGandE's costs will increase by $781,724,364 when Diablo and Helms Creek are placed in service, which will result in an increase of $81.84 per year in its costs to supply a typical residential customer, or 22.42 cents per day. Based on PGandE's cost estimates in 1968, the additions of Diablo and Helms Creek would have decreased PGandE's annual costs by $551,420,077, resulting in a reduction of $57.72 per year in its costs to supply a typical residential customer. The effect of the cost overruns since 1968 is thus an increase of $139.56 per year or 38 cents per day in its costs to supply a typical residential customer. Even using PGandE's later 1978 cost estimates, addition of Diablo and Helms Creek should have reduced PGandE's costs by $187,872,800 resulting in a reduction of $19.68 in its costs to supply a typical residential customer. Thus, even since 1978, subsequent cost overruns have had the effect of increasing PGandE's costs to supply a typical residential customer by $101.52.

Data Sources

FERC Form I and various CPUC decisions were the primary sources of data. Operation and maintenance expenses, plant valuation and plant depreciation were obtained from these sources. Return on capital amounts were based upon PGandE's latest allowed rate of return from the California Public Utilities Commission (CPUC) (see page 1-4). Cost of power needed to replace a portion of the relicensed projects' output was based upon one of PGandE's relatively highest purchased power costs, i.e. the amount paid cogenerators. The actual purchased power costs are likely to be lower, thus reducing the cost impact of the loss of the projects.

Loss of Project Will Result in Reduction in PGandE Load

The loss of the projects in each case results in nearly an equivalent reduction in PGandE's load requirements except for about 1/4 of the energy from the projects which must be replaced from thermal sources. About 3/4 of the energy from the relicensed hydro will supply load requirements of Northern California utilities which are in PGandE's service area. Thus, that portion of the relicensed hydro resource which is presently supplying these utilities will continue to supply loads in PGandE's service area and will not have to be replaced by PGandE. The loads supplied by PGandE will thus be reduced by that amount of the relicensed hydro which supplies the load requirements of the Northern California utilities. The CFM IV resource plan filed by PGandE with the California Energy Commission indicates that after Diablo is in operation PGandE will have considerable excess capacity and that its existing oil and gas-fired thermal units will operate at a low load factor. We have, therefore, assumed that PGandE could replace energy from the relicensed hydro projects by operating its existing oil or gas-fired generation at higher load factors. The energy to be replaced would comprise the 35.39 percent of the total energy produced at Haas/King and Rock Creek/Cresta (the Mokelumne production is not affected by this calculation) which would flow out of PGandE's service area to the Southern California cities which are partner cities seeking the relicense.

There is an error in assuming that all the power must be replaced from alternate sources as shown in the EEI Report. This is not the case.

Tax and Return Calculations

Income taxes were calculated by isolating revenue requirements associated with each alternative and deducting associated operating expenses. Taxes are calculated using a weighted average of the federal and state tax rates with the state amount as a deduction for the federal tax. The tax calculation formulas are shown in the footnotes.

Nuclear Fuel Costs

Nuclear fuel costs are relatively low when compared to current market prices, thus aiding the benefit of Diablo Canyon. Three sources were used to determine the cost: (1) the 1982 PGandE resource plan, (2) PGandE's 1981 rate filing, and (3) 1982 PGandE projections. A mid-range value was used.

Case I Analysis

The Case I analysis is limited to determining the incremental impact of the loss of the relicensing hydro projects on PGandE's costs. The loss of the projects will result in an increase in PGandE's fuel cost to replace the energy from the projects which will be delivered to Southern California which will be offset by a reduction in PGandE's expenses associated with the projects.

The loss of the three relicensed hydro projects will result in a decrease in PGandE's capital-related and operating expenses associated with the projects. The calculation of this decrease is shown on page 1-1. Operating expenses for all three relicensed projects are based on data sources shown in the footnotes. The interest, preferred stock, and equity amounts are based upon PGandE's current authorized rate of return as shown in the latest CPUC decision, an estimate of the book value of the relicensed projects, and PGandE's current capital structure. Income taxes are calculated per footnotes. PGandE's cost of service will decrease by $22,023,458 with the loss of the projects. This figure results from savings in operating expenses, depreciation, and return to capital holders associated with the projects.

PGandE will incur additional expense in replacing project energy which will supply loads in Southern California. All of the output of the Mokelumne Project and 64.61 percent of the output of Rock Creek/Cresta and Haas-Kings would supply loads in Northern California presently served by PGandE.

The relicensed project energy output which would remain in Northern California (2,080,000 MWh) would exceed PGandE's present total annual sales for resale of 1,235,000 MWh. The remaining project energy would displace deliveries from PGandE under special integration agreements with the Western Area Power Administration, SMUD, San Francisco etc. PGandE will have to replace the remainder of the energy which is delivered to Southern California cities, i.e., 35.39 percent of the Rock Creek Cresta and Haas-King output or 611,185 MWh.

We have determined the cost of the replaced energy by using the price paid by PGandE to cogenerators under PURPA which is a weighted average of PGandE's marginal energy production costs. Thus, we are effectively assuming that PGandE's most inefficient thermal resource, which may be oil- or gas-fired, will be the source of the replacement energy. Most recent determinations of prices paid to cogenerators are based on PGandE gas prices of $6 per

MM Btu. Using a heat rate of 11,000 Btu/kWh the cost of the replaced energy would be $66/MWh.

The resulting cost of the replacement power would be $40,338,229 (line 19). Thus the net effect on PGandE's total generation cost is the difference between its replacement generation costs and its reduction in capital and operating costs of $22,023,458 or $18,314,771.

Case 2 Analysis

. The addition of Diablo and Helms Creek will result in an increase in capital and non-fuel related operating expenses and a decrease in fuel costs. Diablo will significantly reduce PGandE's overall fuel costs by displacing higher cost thermal sources. Diablo is expected by PGandE to have a 60 percent plant factor.

PGandE's nuclear fuel cost determined on page 2-1 is $0.90/MM Btu. At a heat rate of 10,200 Btu/kWh the nuclear generation cost would be $9.18/MWh. The calculated fuel savings by displacement of gas-fired generation would be $66/MWh minus $9.18/MWh or $56.82/MWh. Actual savings will likely be lower since the costs used for displaced energy are based on PGandE's least efficient thermal generation. Actual costs of the displaced generation would be lower. Assuming 60 percent plant factor, 12,036,240 MWhs will be produced for a total savings of $683,899,000 due to operation of Diablo. Other operating costs are not considered, but are likely to increase as a result of Diablo. Thus the benefit of Diablo in fuel cost savings to the customer will be less than the fuel savings shown.

The computation of capital-related costs for Diablo are shown on page 2-2. Depreciation and property taxes are based on rates for projects with similar service lives. Tax rate calculations are shown in footnote 2.

Helms Creek calculations are also shown on page 2-2. Operation expenses are projected to be $978,000 taken from PGandE's latest rate filing. Capital costs are estimated using the same methodology as for Diablo.

The calculations for determining the effect of the addition of Diablo and Helms on PGandE's costs are shown on page 2-3. The net increase in PGandE's annual costs after adjusting for the fuel cost savings will be $781,724,364. This will result in an average increase of $13.64 per MWh in PGandE's costs. Assuming an average annual consumption of 6,000 kWh per residential customer the increase in PGandE's costs to supply a typical residential customer will be $81.84 per year or 22.42 cents per day.

Case 3 Analysis

The calculations of the increase in PGandE's capital and operating expenses based on 1968 cost estimates are essentially the same as for Case 2. The addition of Diablo and Helms Creek based on these 1968 estimates would have resulted in a decrease in PGandE's annual costs of $551,420,077 after adjusting the increases in capital and non-fuel related operating expenses by the fuel cost savings. This would have resulted in an average decrease of $9.62 per MWh in PGandE's costs as compared with the actual increase of $13.64 per MWh. The effect of cost overruns has thus been the difference between the $13.64 per MWh increase and the $9.62 per MWh decrease or an increase of $23.26 per MWh relative to 1968 costs. Had the projects been constructed at the 1968 estimated costs the effect on PGandE's costs to supply average residential customers would have been a $57.72 annual decrease in costs or 16 cents per day rather than the $81.84 increase in costs, a difference of $139.56 per year or 38 cents per day.

Case 4 Analysis

The calculation of the increase in PGandE's capital and operating expenses based on 1978 cost estimates are essentially the same as for Case 2. The addition of Diablo and Helms Creek based on the more recent 1978 estimates would have resulted in a decrease in PGandE's annual costs of $187,872, 800 after adjusting the increases in capital and non-fuel related operating expenses by the fuel cost savings. This would have resulted in an average decrease of $3.28 per MWh in PGandE's costs as compared with the actual increase of $13.64 per MWh. The effect of cost overruns since the 1978 estimate has, thus, been the difference between the $13.64 per MWh increase and the $3.28 per MWh decrease or an increase of $16.92 per MWh relative to the 1978 cost estimates. Had the project been constructed even at 1978 estimated costs PGandE's costs to serve a typical residential customer would decrease by $19.68 annually rather than the $81.84 increase in costs based on actual costs, a difference of $101.52 per year or 28 cents per day.

Conclusions

The loss of the relicensed projects will increase PGandE's costs by about 0.3 mill per kWh under present conditions and increase the cost to supply an average residential customer of 0.5 cents per day. Cost over-runs on Diablo and Helms amount to over seventy-seven times that amount or 23.3 mills per kilowatt-hour relative to PGandE's original 1968 cost estimates and more than fifty-six times that amount or 16.9 mills per kilowatt-hour relative to PGandE's later 1978 cost estimates.

Change in PGandE's Costs
Due to Relicensing of Haas-Kings River, Rock Creek-Cresta and Mokelumne Hydro Projects

Case #1.

Assume: Haas-King River, Rock Creek - Cresta and Mokelumne hydro projects transferred to competing applicants.

Decrease in PGandE's Costs Related to the Relicensed Projects

Operating Expenses (1)

1.	Operation and Maintenance		$ 3,500,000 (est.)
2.	Taxes (other than income) (2)		1,352,792
3.	Insurance (3)		77,415
4.	Total Operating		$ 4,930,207

Capital Related

5.	Depreciation (4)		$ 2,657,833
6.	Net Plant (5)		
7.	Haas-Kings River	$20,737,323	
8.	Rock Creek-Cresta	28,175,525	
9.	Mokelumne	20,540,589	
10.	Total Net Plant	$69,453,437	
11.	Interest Expense		
12.	Preferred Stock		
13.	Common Equity		
14.			$ 11,304,786
15.	Taxes (6)		5,788,465
16.	Total Decrease (both operating and capital) — line 4 + line 14 + line 15...		$ 22,023,458

Increase in PGandE's Costs Related to Project Loss

Replacement Power (7)

17. 1,727,000 MWh Haas-King River/Rock Creek-Cresta annual production
    946,000 MWh Mokelumne annual production

18. (Power going out of PGandE control area) x (PGandE incremental cost of energy). See footnote (9).

19. (1,727,000 MWh) (0.3539) ($66.00/MWh) = $40,338,229

Therefore, total PGandE overall cost of service will increase by:

$40,338,229 = cost of replacement power
-22,023,458 = operating and capital cost of the relicensed projects
20. $18,314,771 = PGandE cost increase

21. CPUC jurisdictional (retail) load = 57,310,000 (8).

22. $18,314,771/57,310,000 = $0.32/MWh or .32 mills per kWh.

Thus, the fuel cost impact on PGandE's customers is only .32 mills per kWh. For the average customer this would amount to only $1.92 per year or 5 mills per day (average customer uses approximately 6,000 kWhs per year).

Footnotes

1. Operation and Maintenance:

From 1977 - 1982 Form 1s; total for all relicensed projects

1977	1,760,232
1978	1,814,122
1979	2,111,700
1981	2,684,940
1982	5,446,408

1984 was estimated by trending the actual figures from above ($3,500,000)

2. Taxes other than income:

Taxes allocated to hydro in PGandE's filing at the FERC were further allocated to the relicensed projects based on the relicensed projects' capacity as a percentage of total hydro capacity.

Relicensed projects capacity = 553 MW
Total PGandE hydro capacity = 2,370 MW

Taxes from FERC Filing No. ER82-729 = $4,684,000 (1983 test year)
1984 estimate (2% escalation from 1983)
($4,684,000)(553/2370)(1.02) = $1,352,792

3. Insurance:

Insurance calculated in same manner as taxes other than income:

Insurance from FERC Filing No. ER82-729 = $313,000 (1983 test year)
1984 estimate (6% escalation from 1983)
($313,000)(553/2370)(1.06) = $77,415

4. Depreciation:

Depreciation was calculated as 1.75 percent of original cost of plants (excluding land)

Total original cost of relicensed plants

Per 1982 Form 1	$156,902,435
Associated Land and Land Rights	4,652,988
Total Excluding Land	$152,249,447

	Service Life	Salvage Value
Structures & Improvements	55	-5%
Reservoirs	69	-8%
Equipment	55	-5%
Roads, Railroads, Bridges (Assume average of 60 year life -5% salvage)	55	-10%

5. Net Plant:

Net Plant was estimated for each of the relicensed projects as follows:

(Original Cost*) - [Original Cost* x (1984 - year installed) x .0175]

*Figures were taken from 1982 From 1; land and land rights excluded.

6. Tax and Return Calculation:

State Tax Rate = 9.6%
Federal Tax Rate = 46%

Revenue Requirements	$22,436,411
Less: Operating Expenses	4,930,207
Depreciation	2,657,833
Interest ($69,453,437 x .045)	3,125,405
* Remaining to cover return and taxes =	$11,722,966
.096 + [(1 - .096)(.46)] = .5118	$ 5,788,465
*Return for Common and Preferred Equity (.0665 + .0130)($69,453,437)	$ 5,521,548

*PGandE Weighted Cost of Capital per CPUC Decision No. 83-12-968

	Percent	Cost	Weighted Cost
Debt	44.00	10.22	4.50%
Equity	42.25	15.75	6.65
Preferred	13.75	9.44	1.30
			12.45%

7. $66.00/MWh = PGandE's approximate payment to cogeneration which is based on PGandE's incremental cost of energy and one of PGandE's least efficient gas/oil units.

8. CPUC adopted test year 1984 sales
CPUC Decision No. 83-12-968 p. 123a.

9. Recapture project generation from License applications. A portion of the total project generation will leave the PGandE generation control area and will be used to serve the Southern California Cities. Therefore, PGandE must replace this energy. The portion leaving is equal to 35.39%.

Changes in PGandE's Costs
Due to the Addition of
Diablo Canyon and Helms Creek
(1984 Cost Estimate)

Case #2.

Assume: Diablo Canyon in Rate Base at Current Cost
~~Assume:~~ Helms Creek in Rate Base at Current Cost

Increase in PGandE's Costs as a Result of Diablo Canyon

1. Operating Expenses

Generating Capacity:
2. Diablo I....... 1,084 MW
3. Diablo II...... 1,106 MW
4. Total.......... 2,290 MW

5. Estimated Nuclear Fuel Cost (1):
$0.90/MM Btu

6. Estimated Gas/Oil Fuel Cost:
$5.50 to 6.50/MM Btu

7. Estimated Diablo Heat Rate:
10,200 Btu/kWh

8. Estimated Gas/Oil Generation Heat Rates for one of PGandE's least efficient units used for generation

11,000 Btu/kWh

9. Annual Fuel Cost Savings ($1,000)

10. Gas/Oil Cost = $6.00/MM Btu
11. Nuclear Cost = $0.90/MM Btu
12. 60% plant factor

13. 2,290 MW x 8,760 hours x 0.60 = 12,036,240 MWh

14. Oil 11,000 Btu/kWh x $6 = $66.00/MWh
15. Nuclear 10,200 Btu/kWh x $0.90 = $9.18/MWh

16. ($66.00 - $9.18) x 12,036,240 MWh = $683,899,000 fuel savings

17.	Diablo Capital Related Costs		
18.	12/31/83 Estimated Completion Cost	$4,900,000,000	
19.	Depreciation	$ 183,750,000	
20.	Property Tax	49,000,000	
21.	Interest Expense	220,500,000	
22.	Preferred Stock	63,700,000	
23.	Common Equity	325,850,000	
24.			$ 842,800,000
25.	Taxes (2):		
26.	State Tax (0.096)	$ 76,607,670	
27.	Federal Tax (0.46)	331,838,888	
28.			408,446,558
29.	Total Diablo Canyon Capital Related		$1,251,246,558
	Increase in PGandE's Costs as a Result of Helms Creek		
30.	Operating Expenses		
31.	Operation and Maintenance		$ 978,000
32.	Helms Creek Capital Costs		
33.	Total Project Cost as of 12/31/83	$ 886,000,000	
34.	Depreciation	$ 20,378,000	
35.	Property Tax	8,860,000	
36.	Interest Expense	39,870,000	
37.	Preferred Stock	11,518,000	
38.	Common Equity	58,919,000	
39.		$ 139,545,000	
40.	Taxes (3):		
41.	State Tax (0.096)	$ 13,851,917	
42.	Federal Tax (0.46)	60,001,889	
43.		$ 73,853,806	
44.	Total Helms Creek Capital Related	$ 213,398,806	

Increase in PGandE's Costs Related to Addition of Diablo and Helms

Diablo

45.	$1,251,246,558	capital related
46.	(683,899,000)	fuel savings
47.	$ 567,347,558	

Helms

48.	$ 213,398,806	capital related
49.	978,000	operation and maintenance
50.	$ 214,376,806	

Total Cost Increase

51.	$ 567,347,558
52.	214,376,806
53.	$ 781,724,364

54. CUPC jurisdictional load = 57,310,000 MWh.

55. $781,724,364/57,310,000 = $13.64/MWh or 13.64 mills/kWh.

Therefore, the cost impact of Diablo and Helms is 13.64 mills per kilowatt hour.

Footnotes

1. PGandE Nuclear Fuel Cost

Sources:

PGandE 1982 Resource Plan p. R-8C-1 $0.87/MM Btu
PGandE 1981 Rate Filings; 1982 Projection $0.93/MM Btu

$$\frac{\$113{,}000{,}000}{12{,}300{,}000\text{ MWh}} = \frac{\$9.19}{\text{MWh}}\ \frac{\text{MWh}}{10{,}200{,}000\text{ Btu}}\ \frac{1{,}000{,}000\text{ BTU}}{\text{MM Btu}} = \$0.901/\text{MM Btu}$$

1. $113,000,000 from PGandE CPUC Nuclear Filing Exhibit G, Sheet 1 of 2.
2. 12,300,000 MWh from PGandE CFM IV p. R-6-1, R-6-2.

Escalation Rate Projected by PGandE

Year	%	$	Year	%	$
1982	11.7	.97	1992	15.0	1.18
1983	(13.0)	.85	1993	19.9	1.41
1984	1.0	.85	1994	17.7	1.66
1985	1.0	.86	1995	12.4	1.87
1986	(1.0)	.85	1996	11.5	2.09
1987	(1.0)	.85	1997	8.2	2.26
1988	(5.0)	.80	1998	9.1	2.46
1989	5.3	.85	1999	7.6	2.65
1990	8.0	.91	2000	8.4	2.87
1991	12.0	1.02			

2. Return for preferred stock and common equity = income before tax - 0.096 x income before tax - 0.46 (1 - 0.096) x income BT

$389,550,000 = IBT - 0.096 IBT - 0.41584 IBT
= 0.48816 IBT

$797,996,558 = IBT

3. Return for preferred stock and common equity = income before tax - 0.096 x income before tax - 0.46 (1 - 0.096) x income BT

70,437,000 = IBT x 0.48816

144,290,806 = IBT

Changes in PGandE's Costs
Due to Cost Overruns on Diablo Canyon and Helms Creek
(1968 Cost Estimate)

Case #3

Assume: Diablo Canyon in Rate Base at 1968 Cost
Assume: Helms Creek in Rate Base at 1968 Cost

Increase in PGandE's Costs as a Result of Diablo Canyon

1. Operating Expenses

Generating Capacity:
2. Diablo I ...... 1,084 MW
3. Diablo II ..... 1,106 MW
4. Total .... 2,290 MW

5. Estimated Nuclear Fuel Cost:
$0.90/MM Btu

6. Estimated Gas/Oil Fuel Cost:
$5.50 to 6.50/MM Btu

7. Estimated Diablo Heat Rate:
10,200 Btu/kWh

8. Estimated Gas/Oil Generation Heat Rates from one of PGandE's least efficient units.
11,000 Btu/kWh

9. Annual Fuel Cost Savings ($1,000)

10. Gas/Oil Cost = $6.00/MM Btu
11. Nuclear Cost = $0.90/MM Btu
12. 60% plant factor

13. 2,290 MW x 8,760 hours x 0.60 = 12,036,240 MWh

14. Gas/Oil 11,000 Btu/kWh x $6 = $66.00/MWh
15. Nuclear 10,200 Btu/kWh x $0.90 = $9.18/MWh

16. ($66.00 - $9.18) x 12,036,240 MWh = $683,899,000 fuel savings

17.	Capital Related		
18.	12/31/68 Estimated Completion Cost	$319,670,000 (1)	
19.	Depreciation (2)	$ 11,987,625	
20.	Property Tax (2)	3,196,700	
21.	Interest Expense (2)	14,385,150	
22.	Preferred Stock (2)	4,155,710	
23.	Common Equity (2)	21,258,055	
24.			$54,983,240
25.	Taxes:		
26.	State Tax (0.096)	$ 4,997,790	
27.	Federal Tax (0.46)	21,648,763	
28.			26,646,553
29.	Total Diablo Canyon Capital Related		$81,629,793
	Increase in PGandE's Costs as a Result of Helms Creek		
30.	Operating Expenses		
31.	Operation and Maintenance		$ 978,000
32.	Helms Creek Capital Costs		
33.	Total Project Cost as of 12/31/68	$211,118,000	
34.	Depreciation	$ 4,855,714	
35.	Property Tax	2,111,180	
36.	Interest Expense	9,500,310	
37.	Preferred Stock	2,744,534	
38.	Common Equity	14,039,347	
39.			$33,251,085
40.	Taxes (4):		
41.	State Tax (0.096)	$ 3,300,665	
42.	Federal Tax (0.46)	14,297,380	
43.			17,598,045
44.	Subtotal		$50,849,130

Increase in PGandE's Costs Related to Addition of Diablo and Helms

Diablo

45.	$ 81,629,793	capital costs
46.	(683,899,000)	fuel savings
47.	$-602,269,207	

Helms

48.	$ 49,871,130	capital savings
49.	978,000	operation and maintenance
50.	$ 50,849,130	

Total Cost Impact

51.	$-602,269,207
52.	50,849,130
53.	$-551,420,077

Therefore, if Diablo and Helms would have been built at their 1968 cost estimates, costs to PGandE customers would have dropped by $551,420,077 or

54. $551,420,077/57,310,000 = $-9.62 per MWh or -9.62 mills per kWh

Therefore, the cost to an average customer should have dropped by $57.72 per year or 16c per day had Diablo and Helms been completed at their 1968 cost estimate.

Change Over Case #2

55.	$ 13.64
56.	-(9.62)
57.	$ 23.26/MWh or 23.26 mills per kWh

Therefore, customer pays $139.56 more per year or 38¢ per day as a result of the cost over runs.

Footnotes

1. 1968 FERC Form 1 (pp 406)

2.

	Cost per Dollar of Investment	
Depreciation	\$.0375	(NCPA Settlement Agrmnt.)
Property Tax	.01	(NCPA Settlement Agrmnt.)
Debt (.44)	.0450	(Capital Struct. Calc.)
Preferred Stock (.1375)	.0130	
Common Equity (.4225)	.0665	

3. Return for preferred stock and common equity = Income Before Tax - 0.096 x Income Before Tax - 0.46 (1-0.096) x Income BT

\$25,413,765 = IBT - 0.096 IBT - 0.41584 IBT
= 0.48816 IBT

\$52,068,318 = IBT

4. Return for preferred stock and common equity = Income Before Tax - 0.096 x Income Before Tax - 0.46 (1-0.096) x Income BT

\$16,783,881 = IBT x 0.48816

\$34,381,926 = IBT

Changes in PGandE's Costs
Due to Cost Overruns on Diablo Canyon and Helms Creek
(1978 Cost Estimate)

Case #4

Assume: Diablo Canyon in Rate Base at 1978 Cost
Assume: Helms Creek in Rate Base at 1978 Cost

Increase in PGandE's Costs as a Result of Diablo Canyon

1. **Operating Expenses**

Generating Capacity:
2. Diablo I....... 1,084 MW
3. Diablo II...... 1,106 MW
4. Total.......... 2,290 MW

5. Estimated Nuclear Fuel Cost:
$0.90/MM Btu

6. Estimated Gas/Oil Fuel Cost:
$5.50 to 6.50/MM Btu

7. Estimated Diablo Heat Rate:
10,200 Btu/kWh

8. Estimated Gas/Oil Generation Heat Rates from one of PGandE's least efficient units
11,000 Btu/kWh

9. Annual Fuel Cost Savings ($1,000)

10. Gas/Oil Cost = $6.00/MM Btu
11. Nuclear Cost = $0.90/MM Btu
12. 60% plant factor

13. 2,290 MW x 8,760 hours x 0.60 = 12,036,240 MWh

14. Gas/Oil 11,000 Btu/kWh x $6 = $66.00/MWh
15. Nuclear 10,200 Btu/kWh x $0.90 = $9.18/MWh

16. ($66.00 - $9.18) x 12,036,240 MWh = $683,899,000 fuel savings

17.	Capital Related		
18.	12/31/78 Estimated Completion Cost..	$1,580,123,593 (1)	
19.	Depreciation (2)...............	$ 59,254,635	
20.	Property Tax (2)...............	15,801,236	
21.	Interest Expense (2)...........	71,105,562	
22.	Preferred Stock (2)............	20,541,607	
23.	Common Equity (2)..............	105,078,219	
24.			$271,781,259
25.	Taxes (3):		
26.	State Tax (0.096)..............	$ 24,703,997	
27.	Federal Tax (0.46).............	107,009,482	
28.			131,713,479
29.	Total Diablo Canyon Capital Related..................		$403,494,738

Increase in PGandE's Costs as a Result of Helms Creek

30.	Operating Expenses		
31.	Operation and Maintenance.........		$ 978,000
32.	Helms Creek Capital Costs		
33.	Total Project Cost as of 12/31/78......	$380,116,318	
34.	Depreciation (4)..................	$ 8,742,675	
35.	Property Tax (4)..................	3,801,163	
36.	Interest Expense (4)..............	17,105,234	
37.	Preferred Stock (4)...............	4,941,512	
38.	Common Equity (4).................	25,277,735	
39.			$ 59,868,319
40.	Taxes (5):		
41.	State Tax (0.096).................	$ 5,942,821	
42.	Federal Tax (0.46)................	25,742,322	
43.			31,685,143
44.	Subtotal (both capital and operating)................		$ 92,531,462

Increase in PGandE's Costs Related to Addition of Diablo and Helms

Diablo

45.	$ 403,494,738	capital related
46.	(683,899,000)	fuel savings
47.	$-280,404,262	

Helms

48.	$ 91,553,462	capital related
49.	978,000	operation and maintenance
50.	$ 92,531,462	

Total Cost Impact

51.	$-280,404,262
52.	+ 92,531,462
53.	$-187,872,800

CPUC jurisdictional load = 57,310,000 MWh

54. $-187,872,800/57,310,000 = $3.28/MWh or -3.28 mills/MWh

Therefore, had Diablo and Helms been finished at their 1978 cost estimates costs would have dropped to PGandE customers $3.28 per MWh.

	Change From Case #2
55.	$13.64
56.	-(3.28)
57.	$16.92 MWh

Therefore, PGandE's customers face a cost increase of $16.92 per MWh over what they would have experienced had Diablo and Helms been finished at their 1978 cost estimates. This amounts to $101.52 per year or 28¢ per day for the average customer.

Footnotes

1. 1978 FERC Form 1 (page 406)

2.

	Cost per Dollar of Investment
Depreciation.............................	$.0375 (NCPA Settlement Agrmt.)
Property Tax.............................	.01 (" " ")
Debt (.44)...............................	.0450 (Capital Struct. Calc.)
Preferred Stock (.1375)..................	.0130
Common Equity (.4225)....................	.0665

3. Return for preferred stock and common equity = income before tax - 0.096 x income before tax - 0.46 (1 - 0.096) x income before tax

   $125,619,826 = IBT - 0.096 IBT - 0.41584 IBT = 0.48816 IBT

   $257,333,305 = IBT

4. Cost per dollar of investment:

Depreciation	.0230
Property Tax	.0100
Interest	.0450
Preferred Stock	.0130
Common Stock	.0665

5. Return for preferred stock and common equity = income before tax - 0.096 x income before tax - 0.46 (1 - 0.096) x income before tax

   $30,219,247 = IBT x 0.48816

   $61,804,390 = IBT

Senator MURKOWSKI. Mr. Penn, general manager of Wisconsin Public Power System. We welcome you to the subcommittee and look forward to your testimony.

STATEMENT OF DAVID W. PENN, GENERAL MANAGER, WISCONSIN PUBLIC POWER INC. SYSTEM

Mr. PENN. Thank you for allowing me to testify today concerning Senate bills 426, 403, and 1219. I have not yet seen a copy of Senate 1260, but would appreciate a possibility of commenting for the record later on.

My name is David Penn. I am the general manager of Wisconsin Public Power, Inc. System. You may wonder why I am going to tell you a little bit about my company, since one of the private utility witnesses this morning already spent a good share of his testimony doing so.

Unfortunately, many of his numbers and facts were in error, and I would like to speak for myself, anyhow. Walt Sandbert, if you are still here, shame on you. He knows full well that the remote system dispatching and the geographic disperson of customers benefiting from Grandfather Falls differ very little between our two companies. I would think that would be the situation throughout the country.

The thrust of my statement is that it is essential to give consumer-owned municipal electric utilities a chance to compete both in hydrorelicensing and in the overall industry if the rates of all consumers are to be held in check.

My organization, Wisconsin Public Power, is a joint action bulk public power supply utility created under special State statute. As such it is a political subdivision of the State of Wisconsin. WPPI has 26 municipal members which currently serve about 170,000 retail customers throughout the State. Only municipal electric utilities can be members. WPPI provides virtually all its members wholesale electricity, a load of a little over 300 megawatts. We do this by purchasing where prices are lowest from six large private utilities.

I speak to this because I strongly believe that WPPI's existence as a potential competitor in the bulk public power supply markets has had a beneficial impact on wholesale and retail rates in Wisconsin.

Recent rate filings in the State confirm this. The private companies now compete more with each other, and recognize that municipal electrics have options other than being captive customers.

Also, retail competition is fierce as each utility of whatever ownership form is always looking over its shoulder and measuring its performance against all competitors. All ratepaying customers benefit, whoever they're served by, and with the advent of organizations like WPPI, the public power yardstick is more viable.

Presently WPPI is competing for two hydroelectric licenses. The first is with Northern States Power for the Hatfield site 12 miles from our member Black River Falls. It itself has a hydroproject within the city limits. Hatfield is a 6-megawatt site. Wisconsin has many sites, but they are small in size generally. This small additional amount of hydrogeneration which would make Black River fully self-reliant is only an imperceptible one one-thousandths of Northern State Powers' generation.

Our second competing application is with the Wisconsin Public Service Corporation over the Grandfather Falls site on the Wisconsin River. This is a 17-megawatt site. Our license application was filed March 30, 1984. Incumbent Wisconsin Public Service Corporation filed 9 months later, in December of 1984. Their application contains proposals for certain improvements beyond their current methods of operation, boat ramp, public parking, duck nesting, fishing areas.

We are now considering the feasibility of further improvements to our license applications. Again, the benefits of competing in the license application process. The economic realities in Wisconsin are such—much like what Gordon just described—that the construction of new, large central powerplants will not occur until at least the turn of the century. Reserve margins in our State exceed 40 percent. The only realistic way that Wisconsin municipals and our organization, WPPI system which has no generation can obtain generation and move toward self-reliance and independence is through the development of these existing hydro projects.

S. 426 and S. 403 would prevent this option, which is possible under current law, because it would create an effective preference on relicensing for the current licensee. S. 426 and S. 403 would also harm the public interest in development of our country's hydro resources. If there is a preference for existing licensees, there will be no competition in the relicensing process, and few, if any, enhancements upon relicensing. Small utilities cannot, and WPPI would not, bear the cost and risks of seeking licenses if the existing licensee has a preference.

The national FERC record mentioned this morning and the Wisconsin experience I have described above to date support this fact. We like the current law. It promotes competition in the overall industry, and it promotes competition in relicensing. Private utilities argue that the risk of takeover and compensation on takeover are unfair, but anyone familiar with the industry knows that there is virtually no risk once a hydro project is developed and in the rate base. Full cost plus a return on investment have been recovered.

Further, as Senator Johnston has established, it is not the bricks and mortar that are valuable; it is the water power. This is only leased, and not owned. While WPPI believes that current law is appropriate, we recognize that Congress may desire some changes. If this must be done, we support S. 1219, recently introduced by Senator Metzenbaum, including especially its provisions on transmission and antitrust review. We feel it has been drafted in the spirit of reaching a balanced public interest position.

Rather than listing the Metzenbaum provisions, let me divert quickly to respond to something said this morning. In Wisconsin's situation, takeover of existing private licenses will not require new capacity as has been said earlier. Not now and not in the future. This is because no new generation will be built for 15 or 20 years; because we have these reserve margins exceeding 40 percent; and because in our situation the load will go with the site. So that the existing licensee will not have to build new capacity for that load which it no longer services.

In closing, I would like to stress my view that promoting competition in hydro relicensing toward the overall social goal of promoting competition in the industry is essential. S. 1219 does this. S. 426 and 403 do not.

Thank you, and I would be eager to try and answer any of your questions.

Mr. MURKOWSKI. Thank you very much, Mr. Penn.

[The prepared statement of Mr. Penn follows:]

TESTIMONY OF DAVID W. PENN, GENERAL MANAGER, WISCONSIN PUBLIC POWER INCORPORATED SYSTEM CONCERNING S. 426, S. 403, and S. 1219

BEFORE THE
SUBCOMMITTEE ON WATER AND POWER OF THE
ENERGY AND NATURAL RESOURCES COMMITTEE
OF THE UNITED STATES SENATE

June 11, 1985

My name is David W. Penn. I am General Manager of the Wisconsin Public Power Incorporated SYSTEM, which is located at 1500 West Main Street, Sun Prairie, Wisconsin.

I would like to thank Chairman Murkowski and the Subcommittee on Water and Power for allowing me to testify today concerning Senate Bills 426, 403, and 1219.

In my testimony I will first provide the Committee with information on my background and on the WPPI SYSTEM. Next, I will provide some specific information about hydroelectric relicensing contests which are in progress in Wisconsin. Then I will discuss the reasons why I believe that neither S. 426 nor S. 403 should be approved by this Committee and adopted by Congress. In particular, I will address the adverse impact which these bills would have 1) on the development of our nation's hydroelectric resources and 2) on overall competition within the electric utility industry. I strongly believe that these two bills would not maximize the development of our nation's hydroelectric resources consistent with environmental concerns and would increase electric rates for all ultimate consumers. Next, I will address certain criticisms which are often leveled at the provisions within the Federal Power Act which S. 426 and S. 403 seek to change. Finally, I will state the reasons why I believe that, if Congress decides it must amend the Federal Power Act as it relates to hydroelectric relicensing, it should adopt S. 1219, recently introduced by Senator Metzenbaum, instead of either S. 426 or S. 403.

I. PENN AND WPPI SYSTEM BACKGROUND

I have a B.S. (Honors) degree from the University of Wisconsin. I also have a Masters Degree in Economics from Washington University in St. Louis and have completed all but the dissertation of the requirements for a Ph.D. from the same university. My major fields of study were economic development, industrial organization, regulation of utilities, and public finance. I have been elected to Phi Kappa Phi and to the O.D.E., the Economics Honor Society.

Upon completing my graduate work, I joined the Federal Trade Commission (FTC) Bureau of Economics as an antitrust economist. I was with the FTC from 1969 to 1974, rising to Chief of the Economic Research and Services section. My area of research specialty was market power in the largest and most capital intensive of the manufacturing companies.

In 1974, I joined the Nuclear Regulatory Commission (formerly the Atomic Energy Commission), where I remained until 1977. I was in charge of both the economic research and economics case work involving the NRC's antitrust review of electric utilities in connection with the licensing of nuclear power plants. Our group reviewed competitive conditions in the electric utility industry in a number of states throughout the country.

From 1977 until 1979 I was with the Department of Energy under Secretary Schlesinger; first as Deputy Director of the Financial Reporting System for energy companies, and then as

Chief Economist and Deputy Director of the Office of Competition. While there I was a member of several interagency task forces and was responsible for the chapter on competition in the National Power Grid Study.

Over the past 15 years I have delivered papers on the electric utility industry and its structure and performance at American Economic Association, Mitre/National Science Foundation, National Association of Regulatory Utility Commissioners', Wisconsin Public Utility Institute, and several national joint action conferences. My writings have been published in: Public Utilities Fortnightly; Mitre-NSF Proceedings; Industrial Organization Review; Journal of Industrial Economics; Antitrust Bulletin; Journal of Economic Issues; Antitrust Law and Economics; FTC, NRC, and DOE monographs and governmental staff reports; and U.S. Senate Hearing proceedings. I am currently a board member and vice chairman of the Wisconsin Public Utility Institute, a member of the State Public Service Commission's Financial Task Force, and Chairman of the Legislative and Resolutions' Committee of the American Public Power Association.

In 1979, I became the General Manager of Wisconsin Public Power, Inc. (WPPI), the non-profit corporation which was the predecessor of the WPPI SYSTEM. I have served as General Manager of the WPPI SYSTEM since its creation in 1980.

The WPPI SYSTEM is a joint action bulk power supply utility created pursuant to Section 66.073 of the Wisconsin Statutes. Under that statute any two or more Wisconsin municipalities which operate electric utilities may form a municipal electric company which is authorized to undertake various activities in connection with providing for the bulk power requirements of its members, including the purchase and sale of power and energy, and the construction of power plants and transmission facilities. As a municipal electric company, the WPPI SYSTEM is a political subdivision of the state of Wisconsin.

The WPPI SYSTEM's 26 municipal members currently serve approximately 170,000 retail customers in communities located throughout Wisconsin. These members are relatively small cities and villages. The SYSTEM provides all of its members' electric requirements beyond that furnished in minor amounts by local generation. Since the WPPI SYSTEM at present does not own any generation or transmission facilities, it purchases its members' requirements at wholesale from six large private utilities. The SYSTEM's load is approximately 310 megawatts.

The mission of the WPPI SYSTEM is to keep the power supply costs of its municipal members as low as possible, so that the members in turn can provide reliable electric service to their residents at the lowest possible cost. The SYSTEM has undertaken to achieve this goal by negotiating favorable power supply contracts with various utilities, by intervening at the Federal Energy Regulatory Commission to oppose rate increases filed by private suppliers, and by developing projects, such as peak demand shaving mechanisms and other load control strategies, to lower the power costs of its members.

In a broader sense, the SYSTEM has sought to achieve its purpose by creating a competitive force within the Wisconsin bulk power supply market. It has done so by giving its member municipalities a vehicle by which they can enter the power markets to deal with utilities other than their adjacent suppliers and also can own and operate generation and transmission facilities if owning such facilities is cost competitive. The SYSTEM has sought to put into place with the private suppliers transmission rate schedules and a menu of bulk power supply options, such as various partial-requirements and surplus schedules, to enable the SYSTEM to purchase from competing sources and to take advantage of opportunities in the power supply markets as they arise. Where appropriate, the SYSTEM has sought to move the service of member loads from one utility to another.

I strongly believe that the existence of the WPPI SYSTEM as a potential competitor in the supply of bulk power to Wisconsin municipalities has had a positive effect on wholesale power costs in Wisconsin. The private suppliers know that because of the WPPI SYSTEM, WPPI's members are no longer captive customers, but can move to ownership of generation or to purchases from other utilities if the rates of their traditional suppliers become uncompetitive.

Beyond the impacts at the wholesale level, I believe that WPPI's activities have had a beneficial effect on retail competition and rates as well. Competition for load (commonly referred to as franchise, fringe area, or borderline competition) is fierce in Wisconsin. One recent sad piece of information to confirm this fact is that one of our members, Deerfield, has just sold its municipal utility to one of the state's large private utilities. The utility assets were sold for well over two times book value as a result of three different privates bidding for them. At the same time, a different Wisconsin municipal received a buy-out offer from a fourth private utility, but voted it down.

This ownership thrust is just the most obvious and recent manifestation of competitive tension at the retail level. Various switches of load by munis and coops are being contemplated. Annexations remain an area of contention. The private utilities are trying to invade each other's retail supply area, and heavy promotional campaigns are being waged to encourage location of new industry. All in all, each utility of whatever ownership form is measuring its rate performance against its competitors and being kept in line by that competition discipline. All ratepayers are benefitting.

My experience in the electric utility industry and in analyzing the structure of capital intensive industries has taught me that the existence of competition within the industry is an absolutely necessary complement to regulation in controlling prices. Electric utilities provide an essential service to the public. The constraints of the industry, including the capital intensity and other high costs of entry, normally lead to a monopoly position at retail and in the past to a near monopoly position at wholesale. The existence of small municipal utilities provides an important yardstick for measuring the performance of private utilities, since a municipal system's sole object is, or should be, to supply reliable power at the lowest possible cost. However, these small municipal yardsticks, while important, have not been fully satisfactory because over time they often have become captive customers of their single wholesale supplier. The advent of entities like the WPPI SYSTEM makes the public power yardstick much more viable.

II. COMPETITIVE HYDRO RELICENSING IN WISCONSIN

The WPPI SYSTEM is presently competing for two hydroelectric licenses. The first is a license for the Hatfield Dam site, currently operated by Northern States Power Company (Wisconsin). The Hatfield site is located approximately 12 miles from the City of Black River Falls, which is one of the WPPI SYSTEM's members. The size of the existing generation at the site is approximately 6 megawatts. The NSP predecessor constructed the facility in 1907-8 and it has been operated since that time without an FERC license.[1] In the 1970s the FERC sought to compel NSP to obtain a license for the site, as required by the Federal Power Act. After a number of delays, NSP finally did file for a license on May 21, 1981, and the SYSTEM and Black River Falls municipal promptly filed a joint competing application for the site. During its delay in filing its application sought by the FERC,

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[1] Because NSP never obtained a license, the present competition is not technically a relicensing. However, the facts are otherwise similar to relicensing contests.

NSP separated out, to be held in a real estate subsidiary, a substantial amount of land surrounding the project so that it would not be covered by the license. Consequently, much of that land has been sold.

The specific local circumstances are such that the WPPI SYSTEM believes that the Hatfield project can be operated most efficiently on a joint basis with a second hydroelectric project located within Black River Falls and licensed to the City. Joint operation will maximize the consumer value of the kilowatt hours which can be produced by the river's two dams, both in terms of the number of kilowatt hours and the time of day at which they are produced. The Hatfield site represents less than 1/1,000 (0.1%) of Northern States Power Company's generating facilities which are held in three companies (NSP-Minnesota, NSP-Wisconsin and Lake Superior District Power Company) as a fully integrated system. Loss of the Hatfield project would have an imperceptible effect on NSP's costs. In contrast, however, the project would have a significant impact on Black River Falls' costs and would allow the Black River Falls municipal utility to obtain virtually all of its power requirements from the river which passes through the City.

The second competing application that the WPPI SYSTEM has filed relates to the Grandfather Falls site currently operated by Wisconsin Public Service Corporation (WPS). This project has a capacity of 17 megawatts. This project is one of a number of important projects in the state which are on the Wisconsin River, which bisects and runs the length of the state. All of these projects are controlled by private utilities.

When WPPI saw that the Grandfather Falls license would expire on December 31, 1987, WPPI proceeded to prepare a competing application for the site and filed that application with the FERC on March 30, 1984, before WPS had filed for a new license. On December 20, 1984, WPS filed its application for a new license. That application proposes certain improvements to the site, obviously prompted by WPS' need now to compete with the WPPI SYSTEM. These improvements include proposals for a boat ramp, public parking, and nesting and fishing areas. For reasons unknown to the WPPI SYSTEM, the FERC refused to issue a notice of WPPI's competing application until WPS' application had been filed and noticed. We felt that we were acting in a responsible manner by preparing our application independently of WPS and filing first. This effort was apparently lost on the FERC.

Both the applications of the WPPI SYSTEM and WPS for Grandfather Falls now have been noticed by the FERC. It remains to be seen whether any other entity will file an application. In light of WPS' application, the WPPI SYSTEM is considering the feasibility of further improvements to the site to improve WPPI's competitive licensing position.

In addition to WPPI, one other Wisconsin municipal entity has filed a competing application for an existing site. This entity is the City of Shawano, Wisconsin, which operates a municipal electric utility. In January, 1979, the City of

Shawano filed the first competing application in Wisconsin and one of the first in the nation. The application relates to a small site, with a capacity of approximately 900 kw, located on the Wolf River within one mile of Shawano's existing lines. The site has been operated under license by Wisconsin Power & Light Company (WP&L) since about 1927. The City of Shawano filed an application for this license because it has operated its own municipal utility for well over 50 years and felt that the City ought to assert its right to obtain the benefits of local water power for its residents. Once again, obtaining this site for the City will have a positive effect on the City's electric costs, while loss of the site will hardly be perceptible in the rates of Wisconsin Power & Light Company. Nine hundred KW is about 1/2,000 of WP&L's generating capacity.

There are a number of cities in Wisconsin that stand in a similar position to Shawano; that is, there are dams within or adjacent to their corporate limits which are licensed to private companies and which the municipalities in the future may seek to operate as public resources for the benefit of their residents. They can do so under the Federal Power Act because of the public preference.

As I mentioned earlier, the WPPI SYSTEM is authorized by its enabling legislation to construct and own generating facilities. The economic reality in Wisconsin today is that the construction of new large central station units will not occur until the turn of the century, if ever. Therefore,-one of the only realistic ways for the WPPI SYSTEM to obtain generation to cover part of its member load is through the development of hydroelectric projects. For this reason, the SYSTEM has spent substantial time and effort analyzing about a dozen hydroelectric projects, including a number of potential new projects on the upper Mississippi River and elsewhere. None of these projects for new hydro generation is economically feasible at this time. Therefore, we are extremely interested in pursuing our right to compete for licenses for projects which have been licensed to private entities for the past 50 years. We believe that having more self reliance by obtaining part of our power from our own resources will benefit the SYSTEM substantially in its efforts to control its members' costs and to operate as a full-fledged competitive utility in the bulk power supply market. Without any generation and transmission facilities of our own, the WPPI SYSTEM is unable to join power pools or to participate fully in the bulk power market.

III. DISADVANTAGES OF S. 426 AND S. 403

For my purposes, the differences between S. 426 and S. 403 are not significant. S. 403 does adopt a more reasonable stance on the takeover compensation issue. However, the important point is that each of these bills will create an effective preference on relicensing for the current licensee of a hydroelectric site. Since licenses for hydroelectric projects run from 30 to 50 years, the result would be perpetual licenses for existing licensees. This result stands in marked contrast to the potential for competition created by the public preference, which has existed in the Federal Power Act since 1920.

In my judgment, S. 426 and S. 403 would substantially harm the public interest in the development of our country's hydroelectric resources. If there is a preference for the existing licensee, there will be no competition in the relicensing process. It is only because of the possibility of asserting the public preference that entities like the WPPI SYSTEM and the City of Shawano can bear the costs and take the risks of seeking to obtain a license. It stands to reason that if the existing licensee does not face the threat of competition on relicensing, it will have very little incentive to propose improvements to its project, including the development of additional capacity and environmental and recreational enhancements. The record to date at the FERC shows quite clearly that where there has been competition for a site, the parties have proposed and developed substantial improvements. Where competition has not existed, improvements are not proposed. About 130 sites have come up for relicensing. Less than 15 of them have been contested. In virtually every uncontested application, there have been no improvements in the refiling. In each of the contested cases, I believe improvements were contained in the license applications. As described above, this has been Wisconsin's experience as well.

Because S. 426 and S. 403 would effectively rule out competition for sites, our nation's hydroelectric resources will not be developed to their full potential under these bills. For this reason alone, these measures should be defeated.

This brings up a point of public policy that would seem to be very awkward for the Congress if it were to pass S. 426 or S. 403, or any similar legislation that is preferential to existing licensees. If a competing license application were to be filed despite the risks and unlikely chance of takeover, the passage of such a bill could very well put the government in a position of approving the adequate but inferior application of the existing licensee. The test of S. 426 and S. 403 is only adequacy, not which application is best. Such a test hardly represents good public policy.

On a second level, S. 426 and S. 403 will adversely affect overall competition in the industry. The electric utility industry consists of about 200 vertically integrated private utilities which dominate the industry, a segment of rural electric cooperatives, and a segment of public power entities, consisting primarily of small municipal systems. This diversity of ownership and size is very important. If there were only large private utilities, there would be no objective standard by which to measure their performance. The existence of rural electric cooperatives and municipal utilities, which are consumer-owned and essentially non-profit enterprises, provides such a measure. Also by their existence, public systems help keep the private utilities in line. This occurs because the utilities know that they face yardstick and market competition.

It is a fact of life that the public power segment of the utility industry is the smallest and weakest segment. There have been a number of antitrust-type proceedings, at the NRC, in the courts and at the FERC, which have addressed efforts by the large private utilities to cut off or retard the development of consumer-owned systems and their abilities to compete. It is very important that this vulnerable part of the industry be protected. Congress and the courts have recognized this fact in a number of ways, including the public preference and the antitrust review requirements associated with nuclear plant licensing. By giving the little guy a chance to compete, the public preference supports and fosters industry diversity which benefits consumers of all of the industry's utilities.

IV. REPLY TO CRITICISMS OF THE FEDERAL POWER ACT

Critics of public preference often argue that the preference is unfair because it allows a public entity to take a project away from a private utility that has invested substantial amounts of money at its own risk. The fact that the compensation on take-over is at original cost less depreciation is pointed to as a further indication of this "unfairness".

On the surface, this argument may have appeal. However, to one familiar with the electric utility industry, it has little merit. First, there is virtually no risk to a private utility in developing a hydroelectric resource. Private utilities are regulated. They obtain permits and construction authorizations for such facilities. Experience has shown that when a generation project is cancelled, or becomes inoperable, for reasons beyond the control of the utility, ratepayers, not stockholders, pay the cost. It is only where the investment is imprudent that a question of the allocation of such a loss occurs. Once a project is developed and placed in rate base, recovery of the investment is virtually assured. The risk argument holds little water.

All existing projects were undertaken and developed subject to the possible assertion of public preference rights on relicensing. The license term has been set in order to enable the utility to recover all of its costs of the facility. A licensed project is more like a lease than ownership. When a lease expires the tenant must leave. This is not unjust. It is not a taking of the property of the tenant. Accounting rules require that these projects be fully depreciated by the end of the license lease term. This means that the full costs of the project have been recovered from ratepayers, plus a return or profit on the project investment over its life. It is somewhat ironic that there has been no movement to change the law on public preference until existing 50 year licenses have begun to expire and the reality of the lease term has become evident.

Finally, and most importantly, it is not the mortar and bricks, or the metal and lumber, of hydro projects that is valuable. It is the right to use the water power. The water power is the public resource that is being licensed. No tenant ever owns this resource. It is for the overall citizenry to keep and control. Without the water power, which clearly can be licensed by the federal government to other parties, the physical improvements become worth very very little. Projects only have value because of the license and the license is by definition a limited term proposition.

V. BENEFITS OF S. 1219

While WPPI SYSTEM believes that current law is appropriate, we recognize that Congress may desire to make some changes.

S. 1219, introduced by Senator Metzenbaum on May 24, is very similar to HR 1815, introduced by Representative Matsui in the House. This bill, which is supported by the WPPI SYSTEM, addresses some of the criticisms leveled at the existing provisions of the Federal Power Act on hydroelectric relicensing. It removes the right of a public system to a last amendment in the licensing process. This right of last amendment has been argued to create an uncompetitive situation, since if the public system can always amend to make its application equal to the private's application, the private utility stands no chance in competition. While we do not believe that this construction of the law is accurate, S. 1219 does clarify the amendment process to insure fair competition.

The Metzenbaum/Matsui Bills also have the following additional benefits:

1) They make environmental concerns in the licensing process explicit.
2) They provide that project records are public records so that licensing competition is on an equal playing field.
3) They recognize the importance of organizational diversity in the utility industry.

4) They protect small systems against discrimination in licensing based on their size and experience.

5) They promote competition in the electric utility industry by conditioning the grant of a new license for an existing project on the licensee's willingness to provide transmission services to other utilities. The ability of a system to transmit power over the systems of other utilities is the essential ingredient to creating competition in the bulk power market. It is entirely reasonable for Congress to have the FERC condition the valuable grant of a license to use a public resource on procompetitive conduct.

6) They insert a prelicensing antitrust review in the licensing process similar to the practice for nuclear plants. Because the nuclear power industry is currently at a standstill, the many benefits obtained by small consumer-owned systems as a result of NRC antitrust reviews are no longer forthcoming. Hydroelectric relicensing provides a partial way of continuing this very beneficial process.

7) They cushion even the imperceptive effect of license transfer by granting 25% of the project's energy output to the former licensee's ratepayers, cost cost, for up to 1/5 of the new license period.

In closing, I would like to stress my view that promoting competition both in hydro licensing and in the overall electric utility industry is essential. S. 1219 does this. S. 426 and S. 403 do not.

I would also like to thank the Committee again for the privilege of testifying here today. If any of the members of the Committee have further questions of me now or in the future, I would be eager to try and answer them. Thank you.

Respectfully submitted by
David W. Penn

Senator MURKOWSKI. Mr. Hardy.

STATEMENT OF RANDALL W. HARDY, SUPERINTENDENT, SEATTLE CITY LIGHT

Mr. HARDY. Thank you, Senator. I will be brief, given the length of the time we have spent today. My name is Randall Hardy. I represent most all of the public generating utilities in the Pacific Northwest. That is, the City of Seattle, Tacoma, Eugene, OR, as well as public utility districts of Grant County, Chelan County, Douglas County, and Pend Oreille County.

We collectively own over 7,000 megawatts of generation. I think that is half or better of the total amount of generation owned by public utilities in the country. We are in a somewhat different position than you have heard from virtually any other witness today, given that circumstance.

Hydro is not trivial to us. That is one theme you have heard today. Hydro is 85 percent of my power supply. My own hydro, Seattle City Light's own hydro base. The rest we buy from Bonneville. For most of the other generating utilities, it is even more than that. The loss of those facilities would, I think it is pretty clear, have substantial rate impacts on our ratepayers and those of all the other public generating utilities that I represent.

We find ourselves in a dilemma. We do not—we see, I think quite frankly greater risks to our particular members involved with any legislation. A bill on the order of S. 403 or S. 426 creates risks in that while it would protect us along with the private utilities as existing licensees, it would eliminate public preference, and we do not think that is a desirable portent either in the case of relicensing or for what it might bode for treatment of preference in other hydropower issues.

On the other hand, we do not support S. 1219 in that that eliminates any preference for existing licensees. Our firm recommendation is consistent with that of APPA, which is that any legislation at this time is premature.

We would much rather see what the outcome of the current appeal in the *Merwin Dam* case is and then be able to decide just what it is we want to legislate rather than trying to do that in advance of that particular court decision.

We feel comfortable even though we have got these conflicting pressures on both sides of being an existing licensee and also a preference customer, we feel comfortable with the existing system. There is some competition. We know the rules of the game, and we don't in this case want to limit FERC's discretion in that area. We think the risks associated with proceeding with any legislation are substantially greater than simply sticking with the existing rules of the game.

One final point that I would make it is unique to the public generating utilities and it is built on a theme of some questions that Senator Evans has asked of previous witnesses, we feel I think in the public interest that we represent as public utilities and also as generating utilities is the fact that we took the risks to build those dams ourselves back some 40, 50 years ago. In the case of Seattle City Light, we absorbed higher rates. Our ratepayers paid on the order of 5 mills wholesale cost for the dams that we owned in the Skagett projects in upper northwest Washington for some 25 or 30 years when the Bonneville rate was at 3 mills. That doesn't seem like a big difference in today's rate world, but believe you me, in the forties and fifties and sixties that was a significant difference that our ratepayers bore the extra cost of because they were good long-range investments.

If we're now faced with the prospect of losing those dams, and we are currently in a relicensing proceeding, and those dams represent 30 percent of our total power supply, any incentive we have for further entrepreneurial activity in hydro development is effectively removed.

If we cannot realize those benefits over a substantial enough period of time, based on our record of stewardship under the existing FERC rules, we will simply sit back and rely on Bonneville, and I do not think—that certainly is not in the interest of the ratepayers of the city of Seattle, and I do not think it is necessarily in the larger public interest either. So we support both in Seattle's case and in the case of the other public generating utilities in the northwest, trying to stay with the existing FERC process. It has served us well for some 50 years, and we do not see any panic to change it at this stage.

Thank you, Senator.

[The prepared statement of Mr. Hardy follows:]

PRESENTATION OF RANDALL W. HARDY BEFORE THE SUBCOMMITTEE ON WATER AND POWER OF THE ENERGY COMMITTEE OF THE UNITED STATES SENATE

JUNE 11, 1985

My name is Randall W. Hardy. I am Superintendent of Seattle City Light, a municipally-owned utility which serves a population of almost three-quarters of a million people. Approximately 85 percent of our electrical load is served by hydroelectric plants that we own or purchase power from and that are licensed by the Federal Energy Regulatory Commission. In addition to Seattle, I am today speaking on behalf of six other publicly-owned generating utilities in the Pacific Northwest. These are: the City of Tacoma, and Grant, Douglas, Chelan and Pend Oreille County Public Utility Districts in the State of Washington, and Eugene Water and Electric Board in the State of Oregon. Together these seven utilities own and operate approximately 7,000 megawatts of hydroelectric generating facilities licensed by FERC under the Federal Power Act. These generating facilities are not simply useful adjuncts to the operation of our respective utilities; they are of absolutely vital importance without which we could not continue to discharge our utility responsibilities.

With this factual background and against the present legislative context of vastly different and conflicting legislative proposals relating to the re-licensing of hydro projects, I come to you today with an anachronistic message. That message is "the licensing provisions of the Federal Power Act have served this nation well over the past 60 years; please don't change them without specific cause." We include within such provisions the Amendment of 1953 which precludes Federal recapture of municipal licenses. This message is a variation on the well-known maxim: "If it ain't broken, don't fix it." We are well aware that due to recent licensing disputes, some private utilities believe that certain changes to the Federal Power Act are in order. The irony is that these same private utilities, as matters stand right now, are big winners of the main preference dispute now being litigated. Prompted by this thrust, certain publicly-owned utilities have parried with their own sweeping changes to the Federal Power Act. Still other legislation, perhaps prompted by these polarizing efforts, have now and still are being introduced into the Congress.

The basic problem as we see it, however, is that right now no one really knows what it is that ought to be fixed in the first place. All proposed legislation, we needn't be reminded, is an outgrowth of a series of recent relicensing cases before the Federal Energy Regulatory Commission. The last and most important of these is the Merwin Dam case arising in our own state of Washington. When the 50-year license for Merwin Dam expired, two public utility districts sought to take over a project which had been previously licensed to a privately-owned utility. Turning back from the general thrust of an earlier opinion of its own, the Commission reversed an order of an administrative law judge and decided that a public agency preference on relicensing did not apply. Vigorous opinions by Commissioners Sheldon and Hughes held that public preference in relicensing does apply, but only in a very limited manner; and that in the case of Merwin itself, the private utility should retain its license. Disputes also surround the compensation to be paid to the existing licensee if the license is granted to another party.

All these issues were fully briefed and argued before the Circuit Court of Appeals for the District of Columbia last November. A decision in this pivotal case has yet to be rendered.

Apparently set in motion by guesses as to which way the Court will rule, we now are confronted with a whole menu of legislative choices, ranging from short but critical changes to a virtual wholesale restructuring of the relicensing process.

Our suggestion to the Congress is simple: Let's wait and see what the Circuit Court does with the case now before it. Nothing at all will be lost by anybody through such a course of action. It may well be that the Circuit Court will render a decision which by its nature will either persuade even the losers of a certain justifiable approach, or at least will suggest specific corrective legislative changes to those parties, whomever they may be, who are aggrieved by that decision.

The Federal Power Act is a proven old war horse. It has served this nation well for over 65 years and has accomplished the harnessing of virtually all the practicable hydroelectric resources of this nation in a safe, orderly and, we maintain, environmentally-responsible manner. The 1920 Act with its 1953 Amendment is a classic example of a proper one-step licensing approach. The federal government clearly has paramount jurisdiction over all hydro licensing efforts. Perhaps if the clear example of the Federal Power Act had been followed in the field of nuclear licensing, the unfortunate record in that field may have been improved. Before we undertake to rewrite this legislation which has served us so well over the century, we should know what precisely it is we want to change. That moment, it seems to us, cannot occur prior to the Circuit Court's decision, and perhaps a subsequent decision by the Supreme Court if it were to grant a petition for review to the losing party.

Let's analyze a bit further the two contending positions that are on opposing sides of this legislative scrap.

On the one side, we have a legislative preference for public agencies that has been reflected in various pieces of federal legislation for almost a hundred years. As applied to resource development, this is a preference granted to public agencies and bodies in both the development of hydroelectric resources together with preference in access to federally-generated power. Many different results have occurred over the years resulting from battles over "preference." In the recent *Merwin Dam* case we have seen a majority of the Federal Energy Regulatory Commission refuse to apply preference in project relicensing, but a strong separate opinion held that it does apply, albeit in a limited way. However, only two months ago that same Commission held that public agency preference *does* apply to the disposition of *Niagara Project* power by the Power Authority of the State of New York. Specifically, it held that so-called "paper agencies" which serve to act merely as conduits of Niagara power to private power companies did not pass muster under public agency preference provisions. In *Niagara*, the Commission explained one key rationale for public agency preference by noting that the "yardstick" of comparison between rates charged by public agencies supplied by Federal power and those charged by private-for-profit corporations served a very useful public purpose. It is true that there is usually no direct "competition" in the normal commercial sense between public and private utilities; each are usually the only suppliers within their own service territories. The usefulness of publicly-owned agencies has been not so much to compete with private power companies for new territory or customers, but to provide a means of rate and service comparison. This practical standard of comparison, many citizens would feel, is a very useful addition to the regulatory efforts or state and federal rate officials.

The other basic force on this legislative battleground is represented by investor-owned companies which hold hydroelectric licenses which are about to expire. These companies argue that equity should be applied to those organizations which have financed, developed and operated hydroelectric facilities over the last half century. They argue that their record of stewardship of a natural public resource should be given a primary consideration in relicensing decisions.

The utilities for which I speak today, being both publicly-owned agencies *and* having substantial amounts of licensed hydroelectric capacity, feel a certain sympathy with both of these contending forces.

On the one hand, we feel we have given the rate payers of the Pacific Northwest, whether they be served by public or private utilities, a very good deal as a result of our licensed projects. Our low, non-profit retail rates have helped to keep down the rates charged to those customers in neighboring areas served by private utilities. Indeed, power sold to private utilities from some of our dams *at cost* helps directly to keep down rates of Northwest private utilities.

At the same time, we certainly sympathize with those project operators who have done a good job in discharging their responsibilities over the last fifty years.

A resolution of these two contending forces in an acceptable manner seems difficult, but I emphasize that we haven't heard the last word on application of the existing law. The *Merwin* record itself is an excellent example of the value of waiting. There, the administrative law judge came out in favor of public agency preference; the full Commission, taking the opposite tack, came out in favor of equities on the side of the private licensee. At the same time Commissioners Sheldon and Hughes strongly supported both the concept of public preference *and* a practical result in favor of the existing private license holder! The Court of Appeals for the District of Columbia has now had this case under consideration for over six months, and in view of the record we think that it is just plain good sense to analyze the decision of the Court before deciding just what it is we have to fix.

In this context, I would like to ask a simple question: What would happen to this highly charged legislative activity if tomorrow the Circuit Court were to affirm the Commission's *Merwin Dam* decision, or to adopt the Sheldon-Hughes approach? I will give you my short answer: it should stop in its tracks. The private utilities would celebrate, and some public agencies would start to work hard on a review petition to the Supreme Court.

As stated, we are not without understanding for all sides in this controversy. We just think that any legislative solution is premature. We do not believe such an approach to be either indecisive or fence-straddling; it is historically sound. We happen very much to like the Federal Power Act of 1920 with its 1953 Amendment, and we would like to be shown exactly what is wrong with it before we support any changes. Such evidence can now come from only one source, and that is a panel of judges which is deliberating only a mile away from this building.

Senator MURKOWSKI. Thank you, Mr. Hardy.

You indicated that you would prefer to see a status quo remain until litigation is resolved. Of course, that litigation in the *Merwin* case has been going on since at least last October with no definitive idea as to when you could expect a resolution. We are confronted with the reality that with existing law further litigation will result if something is not done.

So I would appreciate if you could elaborate on why you feel that further delay necessarily makes things resolve themselves as opposed to just involving more litigation.

Mr. HARDY. Well, I think our feeling is that until you know what the *Merwin* decision is—obviously you can legislate any time and provide guidance but I think it would be more helpful if at least the D.C. Circuit Court had ruled. If the IOU's win that one, then I would presume the impetus for an S. 403, 426 solution becomes somewhat less urgent. If in fact that decision goes in favor of Clark and Cowlitz JOA, then I would think you are not much different than they are right now with the various kinds of competing factions, but if there is some chance that the dynamics can stabilize a little bit, I think it is to our advantage to do that.

Our constituency, frankly, either outcome in the *Merwin* would be OK with us. We could live with that. What troubles us is that legislation, whatever it is, is going to entail substantial risks just by virtue of things that may be totally unrelated to relicensing per se that may well be tacked onto any piece of legislation that moves through the Congress. That is a substantial concern.

Senator MURKOWSKI. Thank you, Mr. Hardy.

Senator Evans, I have a taping with the Alaska delegation at 5 o'clock, and I understand you can be with us for another 15 minutes. I wonder if you would be kind enough to take over. I am told that Senator Wallop will be here about 10 after 5. If not, I will come back and reconvene. Whatever way you wish. I do apologize, and I want to thank those of you who have been with us today as witnesses, the media and as well as interested parties.

Excuse me.

Senator EVANS. I will be delighted to stay, Mr. Chairman, as long as I can. Again, I have a more difficult task ahead of me than even the private and public power fight, and that is to go over and engage in combat with Senator Helms, which I have to do shortly on the floor. [Laughter.]

Senator EVANS [presiding]. First, Mr. Beck, do I understand your utility has about 80 percent of its load as industrial? Is that correct?

Mr. BECK. That is correct, sir.

Senator EVANS. I can understand the desire to acquire someone else's cheap resource in order to continue to provide low cost electricity. Does that not smack of grabbing something else to maintain an economic advantage for expanding the industrial base of the community at someone else's expense? Should citizens of other areas be forced to pay higher power rates simply so they can be placed at a further disadvantage to your area in terms of industrial development?

Mr. BECK. It would if those things were true, sir, but the city of Santa Clara has been aggressively embarked on a program to develop its own resources at today's prices, and that was the thrust. If I might, to just show you the kind of press we get in our city, "Santa Clara $1.3 Billion in Debt." Largely as a result of the aggressive development of our resources, some $800 million worth of debt. So that charge is simply not true, not defensible.

Furthermore, as I stated in my remarks, I don't believe that there is any effect on the existing utility once the public utility such as Santa Clara would take over projects such as the Mokelumne River project. PG&E currently has a capacity, a surplus capacity. They are not going to rush out and build any $800 million worth of powerplants.

They are not going to suffer, because as a matter of fact as in the situation like my colleague down the table, the load that is currently provided by the PG&E power will then be supplied by us, and so the load and the resource won't go away. So I do not believe either of those charges are accurate.

Senator **Evans**. It doesn't seem to me it makes much difference how much you've done on your own. Presumably, you could do everything on your own, go out and get new power rather than seeking someone else's power source.

Mr. **Beck**. It is not someone else's power source, sir. The license is up for renewal, and we are under existing law attempting to get it.

Senator **Evans**. I see. OK.

Mr. **Von Raesfeld**. If I could add to that, as I pointed out in my statement, we have been customers of PG&E since they came into existence. We started before PG&E did. We've heard a lot today about how their consumers or customers have ownership rights in this. If that's the case, then we have a proportionate sharing in the right of some of the hydro that's been developed and that we've helped pay for. It's not that we're going out and trying to just get all of the cheap hydro; it's an attempt to provide a balance similar to that which the private company has.

To the extent that we have funded new projects at today's costs and that those go on line, since we are in the PG&E service area, to the extent we provide our own, we relieve them from continuing to provide a level of their higher cost generation. Thus there should be a savings to their customers.

Mr. **Penn**. Senator Evans, if could I add, too, your hypothetical that you set up assumes that the existing state of competition is ideal, and perhaps should be set in cement. The competition I want to stress is the industry competition. It's a process, and if anything I would say does it make sense for someone to have perpetual use of a resource rather than having it moved around and competed for.

Senator **Evans**. Let me turn to Mr. Hardy, since I obviously have a more particular interest in the northwest, as Randy might guess. We have been talking a lot about these processes as they relate to public versus private power. I would guess we are going to get to a point, if not now, then some time in the future, when public agencies will seek licenses now held by public agencies. In fact, if that is the case, the public preference now applies to the case of a tiebreaker. What should apply in the case of head to head competition between two public agencies vying for the same license?

Mr. **Hardy**. I think if the existing licenseholder has demonstrated acceptable execution of his stewardship responsibilities, that the preference should go to the existing license holder.

Senator **Evans**. Then why shouldn't the same apply between the public and private entity, if the private entity has fulfilled its responsibilities in a reasonable manner to the same degree as the existing licensee holder had in your case between public——

Mr. **Hardy**. I guess it hinges on your definition of who best represents the public interest. In the case of a public utility, I think that at least the existing law has the presumption that by virtue of the preference clause and its many formulations, that that best represents the public interest. That doesn't say that there aren't other considerations that shouldn't be weighed in that evaluation as well, and many of them have been set forth in these various bills. Where you at least have two like entities of public utilities, I think there certainly is not at least in my mind any question but that if the existing licenseholder has met some standard for stewardship, that that license holder should retain the license.

Senator **Evans**. Are we really at the same point we were in 1920 or in the year subsequent to that in terms of this public interest? Are you saying in essence that by definition the publicly owned utility is operating more in the public interest than a privately owned utility?

Mr. **Hardy**. I do not think that is necessarily the case, Senator, but you have got a number of considerations that you have to weigh, but I think certainly the presumption should be where all other things are equal at a minimum in that case the presumption should be that the public entity best represents the public interest.

Senator **Evans**. A 1953 amendment has been referred to a number of times. I think I understand your reading and your interpretation of the amendment. Has that interpretation ever been tested in court?

Mr. **Hardy**. Not to my knowledge, Senator, and we would concede that it is our interpretation, and there is probably some basis for some ambiguity there.

Senator **Evans**. Is it your interpretation that the Federal Government no longer has the right to recapture?

Mr. **Hardy**. No, that is not our interpretation.

Senator **Evans**. Except under——

Mr. **Hardy**. Under condemnation and emergency procedures they do, but setting that aside for a moment, yes, except in that unusual circumstance, yes it is our interpretation that the Federal Government does not have recapture rights to municipal projects.

Senator **Evans**. Do you think there are any circumstances when the Federal Government should have an opportunity to exercise recapture?

Mr. **Hardy**. I think the 1953 amendments provide the correct circumstance. You know, in a declared emergency with an appropriate condemnation procedure, they can in fact reclaim those hydro projects and provide just compensation however that is defined to the existing licenseholder, and I think that is the appropriate formulation.

Senator **Evans**. Section 10(a) deals with comprehensive plans. Do you detect that there is any such thing existing any place in the country, or has it been interpreted as sort of an ad hoc kind of assembly that comes up whenever a particular relicensing procedure comes up?

Mr. HARDY. I think, Senator, it depends on what region of the country you are talking about. I think the Northwest Power Planning Council's fish and wildlife program for at least the Columbia River and its tributaries, as you well know, probably comes as close to being a comprehensive plan as any document or planning process that I am aware of, and while that is applicable just to one region of the country, I would say that is as good an example as any I can think of that represents that kind of a comprehensive plan.

Senator EVANS. But that's limited, and that was sort of late in the game, at least compared with the time with which 10(a) was put together and this reaction to a comprehensive plan was best suited to a comprehensive plan was inserted in the law, and I guess I've had a tough time finding just how that has been utilized.

The term comprehensive plan connotes one thing I think you have accurately mentioned one that really is a comprehensive plan designed to serve an entire region without specific reference to any particular hydro project. It does not seem to me that that has been the case in most other current or past applications.

Mr. HARDY. I would plead relative ignorance to other regions of the country, Senator. I can only speak for the Northwest, and I think that is the case there even though it did come late in the game.

Senator EVANS. And that's of course on the Columbia River and its tributaries. What kind of comprehensive plan did FERC use as it related to your Skagit relicensing procedures?

Mr. HARDY. We are currently in the middle. We have essentially been in the annual license renewals, and I guess you could characterize it we are in the process of developing the functional equivalent of comprehensive plan in conjunction with the fishery agencies in the Upper Skagit tribes, quite cooperatively, I might add, and we hope to, when we finish, we have essentially been engaging in several years' worth of flow studies, and when we finish those later this year, we hope to formally initiate the license reapplication process. Like I say, that is the functional equivalent of a 10(a) sort of process as best I could conceive it.

Senator EVANS. Would you say, is it even possible to do more than that, or does it make sense to attempt to encourage the development of more comprehensive plans on our river systems, aside from the occasion of a relicensing procedure, in other parts of the country as well as the northwest?

Mr. HARDY. I would say based on our own experience on the Skagit that developing comprehensive plans for particular river systems has some merit. That has served us well. Extending it much beyond that except where you would have a body like the Northwest Power Planning Council that had a statutory responsibility for an entire area, I would be frankly somewhat skeptical. If you don't have a Northwest Power Council or some equivalent entity, then I think the existing process, if worked in good faith by both sides, works pretty well, and I think I'd lay out our process with FERC and with the tribes and with the agencies and with the

Skagit as being what I think is a pretty good example of how that process can work.

Ms. TAYLOR. May I add something, Senator?

Senator EVANS. Certainly.

Ms. TAYLOR. We have operated a little bit differently obviously than the State of Washington does. We have felt that the existing projects that we have looked at and gone after the licenses on that have expiring such as the Rock Creek Cresta and the Hass King project, the application process has been very interesting, and I think FERC has done a good job with it. And when we look at the competing applications as they come in and the upgrades to those applications, unless there was free competition such as we have now, you would have never gotten the upgrades in the system coming out of it. And the fear of the privates that the publics are going to come in and wholesale take over their licenses is not true.

I think the idea that we must have the right to compete with them and that competition benefits all consumers, not those just from the public or the privates, because you get the most out of that particular project. The upgrade in kilowatt hours of production out of that project were considerably enhanced, over 43 percent, because there was a competing project. If FERC had agreed to just accept the PG&E relicensing application saying they'd operated fine in the past, therefore they'd assume they'd work fine in the future, we would have never gotten that.

I think that is very important, because I think, like you have pointed out, things have changed in 50 years, but you also have basic business principles that you still must adhere to, and as you pointed out earlier, if you make a deal for a 50-year license, you get your benefits in those 50 years. Then you have got to compete again, and you have got to come up with the best competitive plan to do the job, and if that best competitive plan serves the consumer the best, that is what you want.

Senator EVANS. Of course, it depends on which consumer you are talking about.

Ms. TAYLOR. No, I don't——

Senator EVANS. The one from which it comes, or the one, you know where it comes or where it goes.

Ms. TAYLOR. Do you really think that is true if the project itself is going to get upgraded and be more beneficial as a project? There is the only limited hydro available. We will all agree to that. No matter where it is, there's only limited hydro available.

Senator EVANS. That is why I am suggesting that rather than plans being made on an ad hoc basis just at the time of relicensing, that we probably ought to do that on a more comprehensive basis preceding the relicensing. Many, maybe most of the relicensing operations that will come up in the next 10 to 20 years will be noncompetitive, just as many which have come up in the last 10 years have been noncompetitive.

Ms. TAYLOR. That's true, and——

Senator EVANS. And as long as they are noncompetitive currently everybody can get by with just the minimum, and it seems to me that maybe we need more comprehensive planning to demand even in the noncompetitive relicensing cases substantial increase in the way in which projects are operated. That is why I am suggesting that maybe a planning procedure that goes beyond just refereeing between two competing applicants——

Ms. TAYLOR. Well, my concern there would be, then you are putting a burden on the consumer, too, that if you say everything, every license must have an upgrade or must have a plan for that license, and in fact that license is being operated at its optimum and there is no competing plan for it, if there is no competing plan for it, we are pretty well studying out all those projects. If we do not feel we can come in with a better competing plan, we do not spend money.

I am an elected person. I do not go back to my constituents and say, I spent $1.5 million going after licenses I am never going to have a chance to get. That would be foolhardy. I would not intend to do that for the very same reasons. Say PG&E had a very fine license that they had taken care of, and they had done that in a few cases where they have done a very good job. I am not going to spend money going after that to upgrade a project that the project's avoided costs are not within the amount of money I have to spend, nor would it be in the best interest of the public for anybody to make PG&E come up with the enhancements to that project that makes it uneconomical for the project.

Senator EVANS. I do not think anybody would. That is outside the boundaries of the current law. You cannot come up with uneconomic requirements——

Ms. TAYLOR. That's right.

Senator EVANS [continuing]. But I can conceive of lots of occasions where you may have no direct competing applications, but you may have an opportunity to end up with a more efficient power supply, and it may be a more efficient power supply that is very cost effective, but for whatever reason there is no competition in the application, and that was the nature and the direction of the question I was asking.

Mr. PENN. Senator, in fact that has been our experience to date. There have been about 130 applications and only 10 or less than 15 of them have been competing applications. However, to answer your question at least from my perspective I would much rather trust the competition in licensing and people making hard business decisions with dollars behind them, both public and private, rather than build up another governmental, or quasi-governmental organization on this planning function, or failing that, be very careful that it be on an ad hoc basis, because I think some of our smaller rivers—for example in the upper Midwest—have a much different situation than the situation you face in the Northwest.

Senator EVANS. I am not suggesting national planning, but remember, as all of you have pointed out so clearly in the case for competition, at the end of 50 years no one owns the license except the—it is up for grabs. If it is up for grabs, and if it is going to be issued by the Federal Government, maybe some minimum qualifications ought to be put on the reissuance of that license regardless of whether there is competition or not.

I may have one or two other questions, but I will just submit them for the record and attempt to speed things along. We do have one more panel, so we had better get to that one now. Thank you.

Our next panel is David R. Conrad, water resource specialist, Friends of the Earth; Scott Reed, member, board of directors, National Audubon Society; and Mr. Russ Shay, California/Nevada representative, Sierra Club.

All right, Mr. Conrad, would you start?

Mr. CONRAD. Mr. Chairman, I wonder if we could start with Mr. Shay, and work this way.

Senator EVANS. Sure, if you have a different direction, go ahead. Mr. Shay.

STATEMENT OF RUSSELL SHAY, CALIFORNIA REPRESENTATIVE, THE SIERRA CLUB

Mr. SHAY. Mr. Chairman, my name is Russell Shay. I represent the Sierra Club, a national conservation organization. I want to thank the committee for giving us the opportunity to testify on the environmental aspects of the hydropower relicensing issue. We have heard a lot of testimony here today on who should own these dams, and we want to urge the committee to take a good look at another question which I think, Senator Evans, you were trying to get at through the last panel, which is how these dams are operated.

Arguments have been raging all day over whether there should be a preference to a tiebreaker. What we want to focus on is how that determination is made before there is a tiebreaker; that one plan might be better than another, might better serve the public interest. This is the 10(a) standard in the Federal Power Act. We think that standard is very broad, it is very mushy, and apparently everyone here thinks that there are going to be a lot of ties because that standard is so broad.

We think the standard should be directed; that FERC should be given guidance that will help them pick out the better plans, and that will encourage competitors to put together plans which attempt to be the best possible plans for the public.

One of the things we see in the 50 years since these licenses were first issued is that many of the resources that we are particularly concerned about are far more valuable than they were at the time the license was first issued, particularly in the case of the anadromous fisheries. There the fish resource is depleted. There are fewer fish, and yet the fish are in higher demand.

The same is true for many other river-related resources. The framers of the Federal Power Act we think clearly recognized that such changes might take place and that a new balance of cost and benefits might be appropriate in the future. That is why they put the term on FERC licenses to begin with.

One of the most important issues we are concerned with and we are going to talk about today is that on anadromous fisheries and other fisheries. I am from California. In our State we face a critical situation with regard to anadromous fisheries. The Federal authorities recently canceled the commercial salmon fishing season in northern California. Last year Congress passed several pieces of legislation, one a $57 million bill to repair damage caused by two major dams to salmon-spawning habitat on the Trinity River. Another bill directed the Small Business Administration to give emergency economic loans to salmon fishermen in northern California because of the depleted salmon fishery resource there.

These resources are directly affected by how FERC licensed dams that are up for relicensing are operated. There is an enormous potential for improvement in the operation of those dams and improvement in the salmon resource and trout resources and other recreational and environmental resources. I have numerous examples in my testimony. I will not go into them now.

In general, we think to make the environment a factor in relicensing, we believe the best possible language would be mimicking section 30(c) of the Federal Power Act, which in the case of exemptions gives Federal and State fish and wildlife agencies the power to dictate mandatory conditions for those licenses—rather, for exemptions.

We think the same or similar language could be done for relicensing. We also think that relicensing legislation should specify some of the factors that the FERC should look at in determining if a public or private license application serves the public interest. We support specifying the following factors, whether or not there is a competing application.

One, plans of each applicant to improve and utilize the project for uses and values including recreation, fisheries, and wildlife. Two, plans of each applicant to protect and mitigate impacts on and enhance fish, wildlife, national cultural resources, and provide public opportunities to use and benefit from such resources.

Three, a record of such applicant in complying with the terms and conditions of its FERC licenses. And four, the electricity consumption of fish and seal improvement programs. That is the conservation program of each applicant.

We believe that conservation still has an enormous potential for delivering new energy to consumers at low cost, and that FERC should examine this, because in effect a license applicant is asking the Federal Government for a new power resource. The Federal Government has a right to ask that applicant, are you using the power resources you now have well?

Lastly, we believe that competition in relicensing can be an important positive factor to the environment. We have seen this under the present system, and we urge the committee to legislate a relicensing process that will encourage challenges to existing FERC licenseholders.

Thank you.

[The prepared statement of Mr. Shay follows:]

TESTIMONY OF RUSSELL SHAY

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BEFORE THE SENATE SUBCOMMITTEE ON WATER AND POWER

ON HYDROPOWER RELICENSING

JUNE 11, 1985

Chairman Murkowski and Members of the Subcommittee:

My name is Russell Shay and I represent the Sierra Club, a national conservation organization with 350,000 members. I want to thank the chairman for giving the Sierra Club the opportunity to testify today on the environmental aspects of the hydropower re-licensing issue.

Much of the testimony you will hear today will be directed toward who should own the dams whose licenses are expiring. We want to urge the committee to address another question--how those dams will be operated.

A Federal Energy Regulatory Commission (FERC) license is a permit to use a public resource. Whomever is given that right should use it in the public interest--not only by producing power, but by conserving and enhancing other public river-related resources.

Many of these resources have increased in value immensely over the 50-year terms of FERC licenses. Fish affected by these dams are now both scarcer and in higher demand, than when FERC issued their first licenses. The same is true for many other river-related resources. The framers of the Federal Power Act recognized that such changes might take place, and that a new balance of costs and benefits might be appropriate in the future. That is why they put finite terms on FERC licenses.

THE ENVIRONMENTAL ISSUES

IMPACT ON ANADROMOUS AND OTHER FISHERIES

Hydropower dams and diversions have a major effect on the ability of salmon to successfully migrate to their spawning grounds, to survive after hatching in rivers and streams, and to successfully migrate out to sea to start the cycle again. Modifications of the terms of hydroelectric licenses when they expire offer enormous potential benefits to fisheries.

Impact on salmon and other anadromous fisheries are now critical issues. Many improvements can be--and need to be--made in the adequacy of water releases, adequacy of fishways upstream, and provision of adequate fishways for downstream migration.

California's commercial fishermen are reeling from the degradation of the state's anadromous fisheries. Recently, fisheries authorities cancelled the commercial salmon fishing season off California's north coast. Fish populations have gone so low that any commercial take was considered too risky. Last year, Congress recognized the north coast of California as a disaster area and directed the Small Business

Administration to provide emergency loans because of greatly reduced catches by the area's salmon fishermen. The 98th Congress also passed legislation authorizing $57 million to clean up damage to anadromous fish spawning habitat on the California's Trinity River--damage largely due to the construction and operation of two major dams on the Trinity. This seems to be a hell of a mess to be in in dealing with an economically important resource that, theoretically, is infinitely renewable.

These same fisheries also face disastrous effects from unprecedented numbers of small hydroelectric projects, caused by federal incentives including those in the Public Utilities Regulatory Policies Act (PURPA). Three factors connect this problem to the re-licensing issue. The environmental aspects of relicensing are in many cases intertwined with those of new small hydro proposals. The applicability of PURPA to small hydroelectric projects, like the issue of whether there should be a municipal preference in re-licensing, is an issue of Congressional intent in hydropower policy which can and should be resolved by legislation. Lastly, the re-licensing and PURPA issues have been joined in proposed legislation now before this subcommittee, Senator Metzenbaum's S. 1219.

OTHER ENVIRONMENTAL ISSUES

The level of river recreation in this country is far higher than ever before. We have more fishermen, and far more rafters, kayakers and canoers. The resources that serve them are far more important, economically and socially, than they were in the past. These recreationists need river flows for their pursuits. They also need access to rivers which hydro project licensees could provide.

There is also the potential for significant mitigations of the environmental costs to wildlife and wildlife habitat caused by hydroelectric projects. Again, the value of these environmental amenities has risen as the cumulative impact of development has made them scarcer, and as public awareness of them has risen.

Last, is an issue critical to all the others we have mentioned. Enforcement of the terms of FERC licenses is almost nonexistant, and in many cases these terms are being ignored.

Example: The McCloud River in Shasta County is one of California's finest trout streams. It is an angler's shrine. The McCloud draws trout fishermen from around the country to fly fish on Forest Service lands, on a Nature Conservancy preserve, and on several private fishing clubs.

Pacific Gas & Electric, northern California's large investor-owned utility, operates a dam on the McCloud, and its license includes mandatory minimum flows to maintain the fishery below them. According to publicly available stream flow records, the dam on the McCloud failed to release the mandated minimum streamflow on 1,392 days over the 1966-1982 water years.

There are many other violators, including the Sacramento Municipal Utility District (more than 5000 days noncompliance at projects on Silver Creek, the Rubicon River, and the American River), and the Nevada Irrigation District (more than 4800 days noncompliance on the Bear and Yuba Rivers).

No environmental conditions on a FERC license are of any value if there is widespread lack of compliance with such conditions. Clearly, enforcement of FERC license terms needs to be upgraded.

MAKING THE ENVIRONMENT A FACTOR IN RE-LICENSING

We believe that the best possible legislative language to protect fish and wildlife resources would mimic Section 30(c) of the Federal Power Act, giving federal and state fish and wildlife agencies the power to dictate mandatory conditions for re-licensings--or at least give the conditions they set the status of rebuttable presumptions within the FERC process. We also believe strongly that the National Marine Fisheries Service, with its special responsibilities and expertise in anadromous fisheries, should be included in the agencies given this status.

We also believe that re-licensing legislation should specify some of the factors the FERC should look at in determining if a license application serves the public interest. We support specifying the following factors to be examined by FERC in evaluating each application for re-licensing, whether or not there is a competing application.

1--The plans of each applicant to improve and utilize the project (...for hydropower and other uses...) and for other beneficial public uses and values including recreation, fisheries, and wildlife.

2--The plans of each applicant to protect, mitigate impacts upon, and enhance fish, wildlife, natural, cultural, and recreational resources and to provide for public opportunities to use and benefit from such resources.

3--The record of each applicant in complying with terms and conditions of its FERC licenses, if any.

4--The electricity consumption efficiency improvement program of each applicant, including in the case of electric utility applicants, the plans, performance, and capabilities of each such applicant in encouraging or assisting its customers to conserve electricity cost-effectvely, taking into account the policies, restrictions, and requirements of relevant state regulatory authorities.

This last factor would serve all the concerns we have raised in our testimony, and more. Energy conservation measures are often the most environmentally benign source of energy, and can result in large cost-effective energy savings. It is only reasonable, when a utility is attempting to acquire (or renew) access to a power resource from the federal government, to see if it has first done all it can to use its own resources as efficiently as possible.

To further address the enforcement of FERC license conditions, we support giving FERC the authority to enforce its own conditions, rather than having to rely on the Department of Justice; and adding a citizen suit provision to the Federal Power Act, modeled on the one in the Clean Water Act, to enable citizens to act to enforce FERC license terms.

In addition, we believe that any re-licensing legislation should include language to amend the Public Utilities Regulatory Practices Act to make it clear that new dams and diversions on natural watercourses do not qualify for the benefits accorded small power producers by that act. I discuss this issue in detail below.

Lastly, we believe that competition in re-licensing can be an important positive factor for the environment, and we urge the committee to legislate a re-licensing process that will encourage challenges to existing FERC license holders.

COMPETITION IN RE-LICENSING

In addressing the importance of competition in hydropower re-licensing, the first thing that has to be confronted is that competition will not be a factor in the re-licensing of many and possibly most hydroelectric projects. Under any of the proposals currently before the Senate numerous hydro facilities will be re-licensed with no competing applications.

With a municipal preference, no one would likely challenge existing municipal license holders. And with a preference for existing license holders and changed compensation standards, fewer--perhaps no--existing license holders will be challenged.

We strongly support encouraging competition in re-licensing. We feel that competitive applications benefit from creativity that is unlikely to come from a bureaucratic review alone. The market for public resources should be tested, and competitive applications provide the real-world way to do this. We feel that competitive applications, even if few in number, will raise the standards applied to all other re-licensings.

In conclusion, re-licensing involves more than who owns what dam. It provides a once-in-50 year opportunity to improve how the public interest in river resources is being served. To conserve and improve the benefits these river resources can yield, re-licensing legislation should:

--Give greater weight to the professional recommendations of fish and wildlife agencies in re-licensing;

--Direct FERC to weigh specific factors including each applicants' plans for improving public benefits, for protecting and enhancing fish, wildlife, and recreational values, and for improving energy conservation;

--Direct FERC to look at the compliance of each applicant with hydro license terms, and set up enforcement mechanisms that will really work;

--Deny PURPA benefits to new dams and diversions on natural watercourses; and

--Encourage competition in re-licensing.

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WHY LEGISLATE ON PURPA?

THE PROBLEM

The number of proposed new small hydro projects is so large that FERC, state agencies, and the public have all been swamped. Even when a critical mass of attention is put together, there is often little or no leeway for effective mitigation measures in many of these projects, because of their small scale and run-of-the river design. And, given the failure of the FERC to take seriously its obligations for comprehensive river basin planning under section 10a of the Federal Power Act, there is no authority to limit the cumulative impacts of these proposals by saying no to individual projects.

Example: The Trinity River in northwestern California supports anadromous fisheries of great value both to commercial fishing and to a tourist industry that derives great benefits from sport salmon and steelhead fishing. The drowning of many miles of spawning habitat by the Lewiston and Trinity Dams resulted in great economic losses to northwestern California. These dams also have despoiled spawning habitats downriver. The blocking of spring flood flows by these dams has prevented the renewal of salmon spawning gravels downstream of the dams. Instead of being cleaned out, reshuffled, and relaid by annual floods, the spawning gravels have lost much of their productivity due to siltification and stabilization by vegetation.

Last year the Congress passed and the President signed H.R. 1438, authorizing $57 million to repair this damage, in an attempt to try to reclaim some of the productivity of the Trinity. Yet at the same time, FERC is processing 38 new small hydro projects in the Trinity River Basin, each of which would contribute to the problem of blocking migation upstream, killing young fish on their way downstream, and preventing or reducing renewal of spawning gravels downstream of the sites.

The reason for the unprecedented numbers of proposed projects is the availability, under current FERC policies, of various federal incentives for small hydro projects--particularly under the Public Utilities Regulatory Practices Act.

WHY PURPA BENEFITS ARE INAPPROPRIATE FOR NEW DAMS AND DIVERSIONS ON NATURAL WATERCOURSES

In California, 90% of the public controversy and environmental concern associated with PURPA projects of every type is directed at new small hydro projects on natural watercourses.

The California Energy Commission, chaired by former Republican state legislator Charles Imbrecht, recently completed its 1985 Energy Plan for the state. One of the purposes of this plan was to divide the state's energy needs into resource-specific blocks. As they were considering the state's needs for additional hydropower, the State Water Resources Control Board urged them to differentiate between new, run of the river hydroelectric projects and projects involving retrofit of existing hydraulic structures, because of the great difference in environmental impact, economic impact, and public opposition between these two classes of projects.

The Energy Commission did so, and on May 15th passed a new State Energy Plan that stated their belief that retrofit projects were clearly preferable to new small hydro projects as energy sources for the state, and that there is ample potential for retrofit projects to meet all of the need for additional hydropower in the state through the plan's 10 year scope.

The Sierra Club strongly supported PURPA and believes its goals--including increasing alternative energy production--are still important. We did not believe that Congress intended to extend PURPA's incentives for such production to new dams and diversion structures on natural watercourses.

On November 1, 1984, the Sierra Club filed suit in the 9th Circuit Federal Court to compel FERC to restrict PURPA benefits to existing hydraulic structures. Friends of the Earth, the National Wildlife Federation, the Wilderness Society, and a number of other national and local organizations were co-plantiffs. That case is still pending.

NEW SMALL HYDRO IS DIRECTLY RELATED TO THE RE-LICENSING OF EXISTING PROJECTS

Environmental problems in re-licensing existing facilities cannot easily be separated from the PURPA issue in many areas. The potential impact of dozens of new small hydro projects is completely disrupting the environment in which existing facilities are to be re-licensed.

It is not rational or pragmatic to ask the operator of an existing dam to mitigate or enhance fisheries, at the same time FERC is issuing licenses and exemptions to projects that will have serious negative impacts on the same fishery, and may even make moot the requirements set in a re-licensing.

Example: The North Fork Feather River was, historically, one of the greatest trout fisheries in California. Unlike most California streams, the Feather is not dependent on highly seasonal snowmelt for most of its water. Instead, it is fed by constant cool springflows that once supported summer low flows of 600 cubic feet per second.

The North Fork Feather is the site of the following existing hydropower dams:

Project #	licensee	license expiration date	capacity
1962	Pacific Gas & Electric	1982	180.4 MW
2105	Pacific Gas & Electric	2004	approx. 325 MW
2107	Pacific Gas & Electric	2003	142.8 MW

Under their current license terms, these dams have downstream releases as low as 35 cfs. The fishery retains a fabulous potential, because of good habitat condition, good water quality, and its cool spring sources, but suffers from nongame fish infestations and habitat and food production limits caused by low flows and diversion structures.

PG&E and the Department of Fish & Game are now studying increasing the flows to help restore the fishery. DFG has already instituted a special two fish limit. Restoration of the trout fishery here will be one of the major goals we would like to see addressed in relicensing the existing projects.

But the same river is the site of 40 proposed small hydro projects at various stages in the FERC process. How can one fairly and objectively address mitigation and enhancement requirements for the existing PG&E projects while at the same time the FERC is independently processing dozens of applications for new projects which would greatly degrade this same fishery?

The one thing the main stream does not have (aside from enough water) is suitable spawning habitat. The wild trout population depends on the river's tributaries for spawning habitat. There is constant downstream migration of wild trout from the tributaries to the main stream. And this is directly threatened by the small hydro projects now proposed, most of which are on the river tributaries.

There are many similar examples throughout the west, including many with important anadromous fisheries.

A SIMPLE SOLUTION

We would like to thank Senator Metzenbaum for addressing this problem head-on in his re-licensing bill, S. 1219. Section 7 of that bill would make future small hydro projects involving new dams or diversions on natural watercourses inelegible for the special incentives for small power producers under the PURPA. We strongly endorse such a measure.

This provision does not prohibit new small hydroelectric projects. It merely removes certain incentives provided by PURPA--mandatory interconnection with the local utility and payment of avoided cost by the local utility for the power produced. Projects economic without these incentives can--and will--be licensed under this proposal. The provision maintains PURPA incentives for retrofitting existing hydraulic structures--dams, canals, viaducts, etc.--for hydropower production.

The Metzenbaum language would not adversely effect the overall goals of PURPA. According to FERC figures for the fiscal years 1980-1984, hydro projects accounted for only 5% of the generating capacity of the small power producers and cpgenerators that qualified for PURPA benefits. FERC predicts this share will drop to 4% for FY 85-86. As much as 1/2 of this small share consists of retrofit projects and installation of hydro capacity on man-made waterways, which would continue to be eligible for PURPA benefits as small power producers under the language in Section 7 of the Metzenbaum bill. The total impact of this language would likely be a 2-3% reduction in new power capacity applying for PURPA's benefits.

In conclusion, denying PURPA benefits to new dams and diversions on natural watercourses would greatly reduce the number of new hydro projects being proposed, greatly uncomplicate fisheries management on many rivers systems (including many with dams due for re-licensing), with a minimal effect on the nation's energy production.

BRIEF COMMENTS ON PROPOSED RE-LICENSING BILLS

S. 426 (Senator Wallop)--This legislation neither directs FERC to encourage environmental improvements in relicensing projects or addresses PURPA. At the same time, its preference for existing license holders and increase in compensation due to a dam owner who loses their license would greatly decrease, and perhaps eliminate, any competition in re-licensing. With neither legislative direction or a competitive situation to encourage environmental improvement, the system set up in this bill would not result in a hard look at either environmental or hydropower resources in re-licensing. For these reasons, we opposed identical legislation in the House.

S. 403 (Senator Johnston)--Like S. 426, this bill, as introduced, neither directs FERC to encourage environmental improvements in re-licensing or addresses PURPA. Its preference and compensation provisions may be more encouraging to competition in re-licensing than those of S. 426.

S. 1219 (Senator Metzenbaum)--This bill does direct FERC to look to improve fisheries, wildlife, recreation, and energy conservation in both competitive and non-competitive re-licensings. Section 7 of the bill restricts PURPA from aplication to new dams and diversions on natural watercourses. The bill includes a preference for public entities in hydro re-licensing, which in the past has resulted in competition in a limited number of re-licensing cases. This bill goes further than any of the others now before the committee in attempting to comprehensively address environmental concerns with FERC's hydropower program.

S. 1260 (Senator Evans)--This bill does direct FERC to look at protection, mitigation, and enhancement of fish and wildlife resources, and at an applicant's energy conservation programs, in its determination of the public interest. It also requires FERC to consider comprehensive river plans developed by states or by the Pacific Northwest Electric Power and Conservation Planning Council. We believe both are very positive steps. We have not had time to adequately examine its provisions for preference and compensation, but they appear to retain significant opportunities for competition in re-licensing.

Senator HECHT [presiding]. Thank you.

Mr. Scott W. Reed, member, board of directors, National Audubon Society.

STATEMENT OF SCOTT REED, MEMBER, BOARD OF DIRECTORS, NATIONAL AUDUBON SOCIETY

Mr. REED. Thank you, Mr. Chairman.

My name is Scott Reed, and I am an attorney in Coeur d'Alene, ID. I am a member of the board of directors of the National Audubon Society, and am presenting this testimony on behalf of Audubon.

In 1971 I was appointed as a Republican member of the Bipartisan Idaho Water Resource Board and served until 1983. During those 12 years the Idaho Water Resource Board was at all times involved in the consideration and development of hydroelectric projects.

My written statement comments specifically upon relicensing. In response to the question of Senator Johnston this morning, I would suggest that relicensing as well as continuous supervision by FERC should be a dynamic, and it should include constant improvements. The Pacific Northwest Electric Power and Planning Act contemplated 20 years and hundreds of millions of dollars to improve fish conditions.

Last year Senator Evans obtained an appropriation of about $25 million to put the thingamagigs, in Senator Johnston's phrase, fish ladders, stream flows, and so forth on dams in the Yakima River to enhance and improve salmon and steelhead.

Our major concern, however, is with new small hydro licensing. From the viewpoint of the fish and as seen by the conservation community, relicensing is the same as licensing. We urge that any legislation be broadened to encompass new licensing specifically to include small hydro projects.

It makes no sense to spend the time and the effort to change the law on relicensing of established projects while ignoring the enormous problems being generated from proliferation of new small hydro projects. The major problem in Idaho and the Pacific Northwest is the proliferation of new small hydro projects spawned by the avoided cost compulsion, quite write-off in energy credits under PURPA.

There are over 50 small hydro applications in the Salmon River drainage pending before FERC. The Salmon River drainage is the prime spawning habitat for the Columbia River steelhead and salmon. The congressional funded efforts at restoration of the salmonadramous habitat will fail if any significant part of the uncontrolled FERC licenses are granted on the salmon.

Under the chairmanship of Senator Evans, the Northwest Power Planning Council adopted the Columbia River Basin fish and wildlife program on November 15, 1982. Last September before the House Subcommittee on Energy Conservation and Power, Senator Evans's successor Keith L. Colbo, as Power Council Chairman, testified that FERC had totally failed and refused to accept and use the Fish and Wildlife Program.

The Power Council will shortly complete a comprehensive river plan that will identify every potential hydro site on every river and stream in Washington, Oregon, Idaho, and Montana. The study will categorize and identify any adverse fish and wildlife impacts on each.

Senator Evans' bill. Under it, FERC will be required to follow, not just to consider, State and regional comprehensive plans relating to fish and wildlife concerns. This is section C of his bill which defines public interest under section (c)(1). We strongly urge support of such compulsory language.

Idaho and the Pacific Northwest have an energy surplus which is predicted to last to the end of the century, yet under PURPA private utilities are compelled to buy at a higher avoided cost every small hydro project submitted by every Tom, Dick, and Harry licensed by FERC.

The ratepayers are paying excessive avoided costs, 12 of the 15 small hydro plants constructed primarily along the Snake River under FERC licenses since 1980 have blown out. The canals or the spillways or the engines blew, and the units failed temporarily or permanently, often with polluting spills into the river, and permanent erosion of the river banks and beds. The results are not surprising. The applicants for the new small hydro projects that I have identified in Idaho includes legislators, lawyers, and fly-by-night stock promoters, three classes of people absolutely incapable of sound engineering or prudent resource management.

We would suggest that the determination of the need for power should be made by State public utility commissions. Where an entity such as the Power Council exists, needs should be determined with the concurrence of the regional power unit.

Under PURPA, as necessarily implemented by State public utility commissions, electric power rates are subsidizing new hydro dams and diversions which have the potential of decimating the anadromous fishery which those same ratepayers have as Federal taxpayers spent millions to enhance and preserve.

In adopting PURPA and granting exemption authority to FERC for small hydro, Congress did not intend to counter and contradict its productive response to the anadromous fish crisis. Yet contradiction to the point of legislative lunacy is exactly what has happened.

The solution is practical, workable, and easy through adoption of amendments and new licensing such as the Evans bill giving solid status and recognition to the planning and experience of States and regions working in the field with fishery resources. The changes are not merely inexpensive. By limiting the avoided cost compulsion and repealing the energy tax credit and fast write-off for small hydro and freeflowing streams, Congress will be saving the ratepayers and the taxpayers, that is, the general public, a bundle of money.

FERC has no river plans. FERC has no energy plan. The legislation should transfer environmental and energy planning to the States and the regions which have done their homework. Thank you.

[The prepared statement of Mr. Reed follows:]

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TESTIMONY
OF
SCOTT REED
MEMBER OF THE BOARD
NATIONAL AUDUBON SOCIETY
BEFORE THE
WATER AND POWER SUBCOMMITTEE
OF THE
SENATE ENERGY AND NATURAL RESOURCES COMMITTEE
ON
HYDRO RELICENSING
June 11, 1985

SUMMARY

RELICENSING

The hydroelectricity relicensing amendments should be broadened to emcompass new licensing specifically to include small hydro projects. In the Columbia River drainage proposed new mini hydro developments on the upstream tributaries threaten the survival of salmon and steelhead runs.

STATE AND REGIONAL COMPREHENSIVE PLANS

The Federal Energy Regulatory Commission (FERC) has slighted, ignored and defied the states and the Northwest Power Planning Council. FERC must be compelled to cooperate with the states and the regions in promoting effective and sound utilization, development and management of the river resources in this country. FERC must follow approved comprehensive rivers plans.

ENERGY NEED

The Pacific Northwest has a power surplus and no present need for small hydro development. Approval of small hydro development should be made only where there is a demonstrated need for power. The determination of the need for power should be made by the state public utility commissions and the Northwest Power Planning Council.

SITE PROTECTION

The states should be given the right to protect and preserve hydro sites for future full scale developmnet. The present FERC process allows small hydrodevelopment by promoters for out-of-state export without regard for the future needs of states. States rights should include protection of state sites.

ECONOMICS

Under the Public Utility Regulations Policies Act (PURPA), the electric power ratepayers are subsidizing new small hydro dams and diversions which have the potential of decimating the Columbia River anadromous fishery. Congress has appropriated more than half a billion dollars for fish passage facilities and hatcheries to protect and preserve threatened and endangered salmon and steelhead. The complusory avoided cost requirements of PURPA together with tax shelter incentives promote dams and diversions on the spawning tributaries. PURPA should be amended to eliminate compulsory avoided cost purchase for small hydro on free flowing pristine streams.

BEFORE THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES SUBCOMMITTEE ON WATER AND POWER

June 11, 1985

Testimony of Scott W. Reed

My name is Scott W. Reed. I am an attorney in Coeur d'Alene, Idaho. I am a member of the Board of Directors of National Audubon Society and present this testimony on behalf of Audubon.

Beginning in 1971, I served for 12 years on the Idaho Water Resource Board and participated in the lengthy process of developing the Idaho State Water Plan adopted in 1976 with additions in 1982.

During those 12 years the Idaho Water Resource Board was at all times involved in the consideration and development of hydroelectric projects. The Board was in a joint venture with Idaho Power Company for a never completed proposal to construct two new dams at Swan Falls and Guffey on the Snake River. The Board studied and considered initiating several smaller hydro projects.

The Board provided grants for studies and loans for construction of new hydro facilities associated with irrigation projects. The Board was the applicant to install a second turbine in the Palisades Dam of the Bureau of Reclamation on the Upper Snake River, a project which required special federal legislation.

The Board also on occasion has opposed certain hydro projects. At Henry's Fork on the Snake River the Board filed an application for a 10,000 c.f.s. minimum flow at the request of the Idaho Department of Parks and Recreation with the specific intent and purpose of protecting Upper and Lower Mesa Falls from being appropriated by Montana Power Company for hydropower development.

Based upon my experience on and off the Idaho Water Resource Board, I can assert with the utmost conviction what you elected senators know to be factual. The state agencies know and care about their water resources. The states are very well qualified to manage the waters that flow through their boundaries.

Water is literally the economic lifeblood of Idaho. There is no state in the Union more dependent than Idaho upon water to provide irrigation, to provide electricity and to provide life sustaining flows for an anadromous and resident sport and recreational fishery. As the record of the Idaho Water Resource Board reflects, the people of Idaho have become increasingly sophisticated and discriminating in applying economic and environmental considerations in determining the wisest use of water.

Unfortunately the Federal Energy Regulatory Commission (FERC) in the implementation of the Public Utility Regulations Policies Act (PURPA) has slighted, ignored and sometimes even defied the states. The hearing record of September 11, 1984 on the Small Hydro Program before the House Subcommittee on Energy Conservation and Power is replete with outrageous examples of disregard by FERC the interests of the states. (Ser. No. 98-182.)

It is difficult to know whether the cause of this defiance by FERC is attributable to federal arrogance or is simply manifestation of all too familiar bureaucratic turf wars.

The predecessor of FERC, the Federal Power Commission, acquired the reputation as the agency that just couldn't say no. In my somewhat limited research, I could not find a single case where an application for a dam had ever been rejected by the Federal Power Commission.

FERC started on the same course. Part of the objections of the states and of the other federal agencies was that not only could FERC not say no but it was refusing to let other federal and state agencies even know that it had been asked.

In this testimony I wish to express the concerns of the states and of the region, specifically of the Northwest Power Planning Council. Other conservation groups have urged the necessity for enlarging the role and participation of the National Marine Fisheries Service and the Fish and Wildlife Service. Audubon fully supports and endorses all action to give a stronger hand to those federal agencies. My testimony simply reflects my more limited experience and knowledge.

RELICENSING

Your committee is considering hydroelectricity facilities relicensing amendments. I urge that any such legislation be broadened to encompass new licensing specifically to include small hydro projects. It makes no sense to spend the time and effort to change the law on the relicensing of established projects while ignoring the enormous problems being generated from the proliferation of new small hydro projects.

I urge you to take a fish eye view of the problem. The fish will go and live wherever the water flows. They will cease to go and to live wherever the flow is blocked or diverted by either a new or an old impoundment or dam.

Relicensing is the same as licensing. The Rock Island Dam decision by the Ninth Circuit (Confederate Tribes and Bands of the Yakima Indian Nation v. Federal Energy Regulatory Commission, 734 F.2d 1347, 1984), has established that upon relicensing FERC must prepare an environmental impact statement and comply with the National Environmental Policy Act just as if there had been no dam at all. The decision is eminently sound.

The physical conditions that existed 50 years ago specifically including the available river flows and fish runs will have inevitably changed. Even more significant will be the changes in the public economic and environmental priorities. This can be demonstrated with a very current example from Idaho.

In 1901 the first hydroelectric dam in Idaho was built in only eight months at Swan Falls on the Snake River about 40 miles south of Boise. The purpose of the dam was to provide electricity to gold and silver mines that have long since disappeared. The dam completely blocked off salmon runs to 157 miles of river and tributaries upstream to Shoshone Falls. In the first few years, people drove out from Boise every spring and fall to spear and net fish from the runs piled up below the dam. Then they wondered why the salmon quit coming.

The little dam at Swan Falls assumed enormous importance in Idaho in 1982 when the Idaho Supreme Court decided that the water right for power to flows as granted in 1920 might be superior to all of the subsequent upstream irrigation development in the Snake River Basin.

For the next two years Swan Falls was the dominant political issue in the Idaho legislature and with the Governor, the Attorney General, Idaho Power Company and the Idaho Water Users Association.

The 1985 session of the legislature passed a compromise package of bills that appear to resolve the political issue.

However, the contest has shifted to FERC where conservationists are raising the issues that were slighted or ignored in the political compromise. The state has asked FERC to reopen the relicensing proceeding to approve the minimum flows fixed in the Swan Falls Agreement. National Marine Fisheries Service and the Idaho Natural Resources Legal Foundation have moved to intervene in opposition to approval of the Agreement.

Relicensing is involved because after the court decision the state sought to reopen the relicense to impose a condition of subordination to upstream development.

The question of minimum flow is of critical importance. The Fish and Wildlife Management Program adopted by the Pacific Northwest Power Planning Council sets water budgets requiring substantially more water to flow through the Snake into the Columbia. One of the sources of that additional water could be presently unappropriated water above the minimum flow in the Swan Falls Agreement as approved by the legislature. The relicensing of the 84-year-old dam could, if reopened, be the place where those very important decisions are made.

If the thinking of the Ninth Circuit expressed in the Rock Island Dam decision had been applied by FERC prior to relicensing Swan Falls, it is just possible that the entire legislative and political turmoil of the last three years could have been avoided. Relicensing was granted before the Idaho Supreme Court decision in November of 1982.

Under the rationale of the Rock Island Dam decision, relicensing should have required preparation of an environmental impact statement and consideration of the conflicting economic factors attendant upon development of new irrigated farms and restoration of lost steelhead and salmon runs. Contrary to the usual confrontational lineup, the interests of Idaho Power Company and of the fishery agencies and sportsmen were and are identical. Both desire maximum flows.

If the environmental and economic analyses had been prepared properly, public hearing prior to relicensing might have led the way to a compromise and resolution quite different from that which evolved from the political battles. The relicense could have set the flow as the amount of remaining unappropriated water with a reduction from the original 1920 water right and thus assured subordination to and security for those holders of water rights who had developed irrigated farms.

Any relicensing legislation should require this type of environmental and economic analysis and the opportunity for public hearings. The process should be commenced several years in advance of the relicensing deadline. This approach will more often than not result in consensus decisions with conditions that are more beneficial to the public and more protective of the natural resources than the rubber stamp renewal which typically occurs where the only applicant is the present owner of the dam.

Revision of relicensing provisions to require comprehensive environmental and economic analyses will provide the opportunity for enhancement of conditions for anadromous and resident fish. However, unless Congress acts immediately to put controls upon runaway FERC licensing of new small hydro, we run the risk of permanent and irreparable loss of far more than would be gained by attention devoted only to relicensing. I urge this Committee to include new licensing in any legislative package to be adopted by Congress.

As a format to work from, I would commend to you the draft bill being circulated by Rep. Al Swift of Washington which will be introduced in the next few weeks. The remainder of my comments are directed to various proposals in the Swift bill, some of which have been previously before the Congress in other bills.

STATE AND REGIONAL COMPREHENSIVE PLANS

Much of the testimony before the House Subcommittee on Energy Conservation and Power last September was devoted to the failure of FERC to pay heed to state and regional plans. Senator George

J. Mitchell testified in support of his bill (S. 2361), "The State Comprehensive River Planning Act", which would require FERC to be bound in any federal hydropower licensing proceedings by approved state comprehensive plans. I concur totally with Senator Mitchell's belief that, "States should play an active role in working with FERC in promoting effective and sound utilization development and management of the river resources in this country". (Ser. No. 98-182, p. 20.)

The plain fact is that the states through their various agencies know more now about their water resources and how conflicts in uses should be resolved than any federal power agency can ever know. In our area this knowledge and intelligence gathering capability has been doubled as a result of the passage and implementation of the Pacific Northwest Electric Power Planning and Conservation Act of 1980. (P.L. 96-501.)

As I have mentioned, there is a Idaho State Water Plan which must be reviewed and revised as necessary by the Idaho Water Resource Board every five years. The Idaho Fish and Game Commission has gone through extensive planning involving a thorough examination of all of the waters of the state. Other federal agencies such as the Bureau of Reclamation, Corps of Engineers and the Bureau of Land Management have recognized this Idaho planning and have generally been willing to comply with the state policies and objectives.

The Northwest Power Planning Council, which consists of two representatives each from Montana, Idaho, Washington and Oregon, was required by Section 4(h) of the Regional Power Act to develop "a program to protect, mitigate and enhance fish and wildlife" in the Columbia River drainage. At the request of the Power Council all of the state and federal fish and wildlife agencies and the Indian tribes joined in nearly unanimous agreement to submit 2,200 pages of recommendations for fish and wildlife programs. The concurrence of red and white was itself a minor miracle apparently reflecting a realistic recognition that solidarity to restore the resource is better than civil war to divide the last fish. The Power Council conducted public hearings in the spring of 1982, published a Draft Fish and Wildlife Program on September 16, 1982, held more hearings and adopted the Columbia River Basin Fish and Wildlife Program on November 15, 1982.

In the September hearing before the House Subcommittee on Energy Conservation and Power, Keith L. Colbo, Power Council Chairman, testified that FERC had totally failed and refused to accept and use the Fish and Wildlife Program:

> **FERC's failure to implement this portion of the Fish and Wildlife Program is especially disturbing given the current power situation in the region. Our power plan concluded that there is no need for additional hydropower until the 1990's. Clearly, FERC has plenty to time to consider the council's Fish and Wildlife Program instead of rushing ahead with piecemeal approval of pending hydro applications.**
>
> **(Hearing Ser. No. 98-182, p. 150.)**

The Power Council has undertaken a study of all potential hydro sites on all rivers and streams within the four states. That study will assess each site as to hydro potential and impact upon fish and wildlife. The study will be a categorization of proposed hydroelectric projects based upon their potential impacts to fish and wildlife resources.

The first category is of sites where construction and operation of hydropower facilities will have insignificant adverse effect such as at old established dams like Swan Falls, powerhouses at existing dams like Palisades or projects using existing pipelines, canals or flumes.

The second category is of sites which will have significant adverse effects which could be reduced or eliminated by development and implementation of proven on-site mitigation techniques.

The third category is of sites with adverse effects which cannot be satisfactorily mitigated.

When completed within the next few months, the rivers study will constitute a total comprehensive rivers plan for hydro development to give the energy licensing authority as well as applicants solid guidelines as to what should and should not be developed. Maine has a comparable rivers plan. It would be a foul abuse of federal power to allow FERC to disregard such a comprehensive plan. It would also be a flagrant waste of taxpayer dollars to pay for such a comprehensive rivers study and then allow it either to be disregarded or to be enforced only through federal litigation.

Through the Swift bill or through Senator Mitchell's bill modified to include regions as well as states, Congress must enact legislation this year to compel FERC to follow approved comprehensive rivers plans.

Other states and regions may have to complete the planning process. In Idaho and in the Pacific Northwest the work is done. We ask only that FERC comply with the planning and programs that are binding upon all of the other state and federal agencies.

ENERGY NEED

Under present applicable law, hydro licenses are granted without regard to consideration of whether there is any need for power. The approach defies common sense and sound business practice. The only comparable government program is the continued production of atomic bombs which has a supposed justification in the necessity to prove that we are just as determined or just as insane as the Russians. There is no competition rationale to authorizing production of power without need.

Audubon endorses Section 4 of the Swift bill which would require a FERC determination in every hydropower application as to whether the energy is reasonably necessary to meet demand at least cost. I would expect that our position would be completely parallel with and supported by both public and private power companies. The requirement under PURPA that utilities purchase power from new hydro developers at avoided costs is doing almost as much damage to long range planning by power companies as it is to the environment in encouraging and subsidizing reckless damming and diversion.

The Pacific Northwest has a tremendous power surplus. The real cost of power finally caught up with us. We had been induced into extravagant and wasteful consumption of electricity by cheap hydropower made even cheaper by federal subsidies. The high cost of new thermal power changed our habits. When the price went up, the consumers cut back.

The fiasco of the Washington Public Power Supply System (WPPSS) uncompleted nuclear plants is a notorious fiscal and legal embarrassment. Equally important evidence of the surplus is the quiet and prudent withdrawal by every Northwest utility from proposals for new coal fired plants thought absolutely necessary less than ten years ago.

The Intertie Access Policy Issue Paper of the Power Council issued last week estimates that the Northwest now has and will for a number of years have enough surplus capacity to generate 6,000 to 9,000 megawatts, enough to power six to nine cities of the size of Seattle. The 1984 Northwest Conservation and Electric Power Plan predicated that no new energy sources will be needed if there is low electric demand growth. If the more likely medium-low growth occurs, no new resources will be needed before 1996.

Idaho Power has predicted sizeable surpluses well into the future with spring surpluses well past the year 2,000.

There is no need for more hydropower at this time. Yet since the end of 1980 FERC has issued 138 licenses and exemptions in the Pacific Northwest totalling 510 megawatts and has 553 pending applications supposed to produce 4,628 megawatts.

(Testimony of Terence L. Thatcher, Hearing Ser. No. 98-182, pp. 427-428.)

Every Tom, Dick and Harry can apply and potentially receive a license to generate power where it is not needed to sell to an unwilling but federally compelled buyer. In fact, it is every Tom, Dick and Harry who is applying.

According to Monte Richards of the Idaho Fish and Game Department, twelve of the fifteen small hydro plants constructed primarily along the Snake River under FERC licenses since 1980 have blown out. The canals or the spillways or the engines blew and the units failed temporarily or permanently, often with polluting spills into the river and permanent erosion of the riverbanks and beds.

Sometimes the engineering was poor; sometimes the construction was deficient. Usually the maintenance and operation was nonexistent because the applicants and their employees did not know what they were doing. The small hydro plants included such jerry-rigged devices as using old reversed irrigation pumps.

It may be an embarrassing admission for those of us who believe in the concept that "Small is Beautiful", but in hydroelectric dam construction, "Bigger is Better". The engineering standards and methods of operation used by private and public power companies simply would not allow for the shoddy performance as demonstrated to date by the small hydro operators.

The results are not surprising. The applicants for new small hydro projects that I have identified in Idaho include legislators, lawyers and fly-by-night stock promoters, three classes of people absolutely incapable of sound engineering or prudent resource management. The shoddy performance record has reinforced the resolve of the Idaho Fish and Game Commission to routinely and vigorously oppose all FERC applications on any river or stream where there is the likelihood of any adverse impact to fish or wildlife.

At the present time the Idaho Fish and Game is opposing four FERC applications for small hydro projects in the rapids flowing out of Henry's Lake. Each calls for diversion of water which would not only impact a blue ribbon trout stream, but would also alter the prime riparian habitat for moose and elk.

Some dollar values have been placed on Henry's Fork in a study by the University of Idaho and the state and federal fish agencies. The proposed hydropower development would result in 50% reduction in fishing quality. The annual loss from a 50% reduction in fish catch would be $920,000 and a 50% reduction in the size of fish would result in an additional annual loss of $1.07 million. (Symposium on Small Hydropower and Fisheries, American Fisheries Society, Aurora, Colo., May 1-3, 1985.) While the public would suffer an annual two million dollar loss, the developer would sell unneeded and unwanted power to an unhappy utility and pocket a private profit relatively untaxed.

Faced with persistent opposition, the developers have been offering Idaho Fish and Game a piece of the action. The Department is routinely offered 5% or 10% of the profits if it will quietly go away and allow the stream to be diverted. On Smith Creek, another blue ribbon trout stream close to the Canadian border, the applicant offered half a million dollars if Fish and Game would simply give him the creek.

The Department has said no. FERC has said nothing to date. FERC has rejected only two applications in the nation on environmental grounds; one of the two was at Eagle Rock on the Snake River.

There is a huge backlog and we are fearful that, to mix metaphors, the dam might break with a flood of approvals to spawn hundreds of mini dams and diversions. In mid-1984 there were over 50 applications for the Salmon River drainage alone.

Although the Swift bill does not contain such a provision, I would suggest that the determination of the need for power should be made by the state public utility commissions. Where an entity such as the Power Council exists, need should be determined with the concurrence of the regional power planning unit.

SITE PROTECTION

A regulated private utility must make a showing before a state public utility commission to justify the costs of the project, the need for the power and the appropriateness of the site. In a new small hydro application, FERC looks at none of these very important considerations. One of the most important considerations that is presently omitted is site protection.

The Idaho State Water Plan recognized in a separate policy the importance of acquisition and protection of desirable hydroelectric sites for future development. The rivers classification study of the Power Council will identify such sites. Under the present FERC legislation and regulations, there is no provision for site preservation to insure that the sites will eventually be developed to their maximum potential or to insure that the state can preserve its hydropower potential for future needs of its citizens.

There are several Idaho examples. Several years ago Idaho Power Company made application for low head hydro development on the Payette River. The Idaho Public Utilities Commission turned down the project because of present lack of need for power. The proposal was cost effective and relatively benign environmentally.

There are now several Toms, Dicks and Harrys making applications FERC for smaller scale projects on the Payette River which would foreclose the option of prudent and full scale future development if and when needed.

Every site in Idaho ever considered for a major hydroelectric facility by an established public or private utility is now the subject of one or more applications to FERC by promoters with no track record or experience. There is a nasty constitutional question as to whether the state can for any reason deny a water right to the holder of a federal power license. Yet only the state agencies will be around to try to mitigate the damage when the project is completed or to suffer the consequences when it fails.

An unknown developer announced recently that he had signed a long-term contract with a California utility to provide power at 90 mills from a hydroelectric dam to be built at Star Falls on the Snake River near the city of Twin Falls. The Star Falls site could be developed at some future date when the need is present in Idaho by a private utility or by a public utility such as the Raft River R.E.A. Cooperative which sponsored the Eagle Rock project. If the Star Falls project receives FERC approval, that power will be gone from Idaho forever.

The United States Supreme Court decided in Sporhase v. Nebraska, 457 U.S. 273(1982), that restrictions on out-of-state use of water violated the Commerce Clause. It appears that the Idaho Department of Water Resources could not deny the application for a hydropower water right at Star Falls on the grounds that all the power would be used out of state even though there is an Idaho statute containing such authority. If the applicant were compelled to obtain approval from the Idaho Public Utilities Commission, the project could be stopped and the site preserved for the benefit of future growth in Idaho.

States can constitutionally stop a regulated utility from obtaining a water right and constructing a project to export power. States should be given the same lawful control over unregulated developers.

Unless some state control is given to preserve sites and to protect for future development, water-rich states like Idaho are going to become bathtubs, in Monte Richard's phrase, to supply energy for California heated swimming pools, air conditioning and neon glitter. When the need for additional power in Idaho comes as well it may, the readily available sites will be gone. The public and private power companies will be forced to look at more environmentally sensitive sites or to go to expensive and potentially harmful coal-fired or nuclear plants. States rights should include protection of state sites.

ECONOMICS

Under PURPA as necessarily implemented by state public utility commissions, the electric power ratepayers are subsidizing new hydro dams and diversions which have the potential of decimating the anadromous fishery which those same ratepayers have as federal taxpayers spent millions to enhance and preserve. The program is similar to the federal abuse inflicted upon migratory waterfowl when the Soil Conservation Service pays farmers to drain wetlands which the Fish and Wildlife Service is paying to buy and preserve.

In 1980 when Congress was considering the Central Idaho Wilderness Act which created the Frank Church River of No Return Wilderness, I was privileged to testify before a House Interim Subcommittee on Public Lands in support of a prohibition upon dredge and placer mining upon all of the tributaries of the Salmon River. The gold rush following the skyrocketing rise in gold prices in the late 1970's had created a real threat to the spawning beds from a host of recreational dredge miners.

Congress saw fit to adopt the dredge mining prohibition. The ban and the decline in the price of gold has reduced the dredging danger. In its place we now have the hydro gold rush which is far more serious because of the scope, scale and permanence. Dinky little dams on every tributary and stream have the potential of completing the destruction of the salmon and steelhead throughout the Columbia River drainage.

Congress has appropriated in excess of $180 million for fish passage facilities and related hatcheries in what is called the Lower Snake River Compensation Plan. Another $285 million has been appropriated for similar uses on the Columbia River. Idaho Power Company has spent additional millions by agreement after the failure of fish passage facilities in the Hells Canyon dam complex. The total to date is well in excess of one half billion dollars without regard to what the Power Council will use from Bonneville Power Administration revenues as required to carry out the Fish and Wildlife Program.

While Congress is properly spending to mitigate, alleviate and enhance the salmon and steelhead runs, many of which are close to extinction because of downstream dam construction, Congress through PURPA is encouraging and subsidizing the final solution by allowing and encouraging new mini hydro developments upstream.

There is a reason why the legislators, lawyers and promoters are the principal applicants for hydro development along the free-flowing pristine waters. The reason is money secured by guaranteed return and sheltered by fat tax incentives. An applicant for small new hydros not only cannot lose if successful in his application; he is guaranteed a big tax-free return on a negligible investment.

Until last month every developer of a new hydro site in Idaho approved by FERC could sell power on a 35-year contract to a private regulated utility at an avoided cost of production price of an average of 68 mills. Unlike rates fixed by the public utility commission for regulated private power projects, the price had no relation to the actual proven cost of production for the particular small hydro project.

Last month in response to repeated petitions from Idaho Power Company, the Idaho Public Utility Commission temporarily reduced the average avoided cost to 44 mills. The reduction in the compelled fixed price may slow but will not stop the promoters. Tax benefits make the marginal projects look like winners. The PURPA tax incentives allow investors to claim up to 21% of their investment as energy tax credits and further allow quick depreciation in 15 years or less.

There is a distinction between new small hydro development on free flowing waters and co-generation from factories or hydro developments associated with irrigation projects. The existing established artificial canals and pipelines identified in Category I of the Power Council's rivers plan should be encouraged. New hydro development on pristine streams should be discouraged.

In its order reducing the average avoided cost rate, the Idaho Public Utility Commission explicitly recognized as the kind of new energy development it sought to encourage, "the wealth of electrical generating potential in the factories, farms and canal drops". (IPUC Order No. 19673, May 8, 1985, pp. 4-5.)

The Commission feels that it cannot lawfully make the distinction between avoided costs for factories, farms and canal drops and new hydro development on free flowing rivers. There is a world of difference. PURPA should be amended to allow or alternatively require rejection of avoided cost contracts on free flowing streams where a state or regional plan has identified a significant anadromous or resident fishery that could be adversely impacted by dams or diversions.

It must be recognized that these small hydro developments on pristine streams will be constructed by the same promoters and engineers who put together the projects that blew up or failed along the Snake River. However, instead of being along the well-travelled banks of a big river, those new hydro blowups will occur in the remote mountain wilderness, snow covered and often totally inaccessible for half of the year.

When a failure occurs, the owner or operator will know only that the juice is not flowing. Even if conscientious, he may not be able to make an attempt at repair for months. In the meantime the oil may be dripping into the creek or the limited bypass may have become the new stream channel totally dewatering the downstream spawning beds.

Congress has responded well with appropriations and with creative new legislation such as the Pacific Northwest Electric Power Planning and Conservation Act to the well-founded contention by knowledgeable biologists that every salmon and steelhead now running in the Columbia River is either a threatened or endangered species. In adopting PURPA and granting exemption authority to FERC for small hydro, Congress did not intend to counter and contradict its productive response to the anadromous fish crisis. Yet contradiction to the point of legislative lunacy is exactly what has happened.

The solution is practical, workable and easy through adoption of amendments and new legislation comparable to the Swift bill giving solid status and recognition to the planning and experience of states and regions working in the field with the fishery resource. The changes are not merely inexpensive. By limiting the avoided cost compulsion and repealing the energy tax credit and fast write off for small hydro on free flowing streams, Congress will be saving the ratepayers and the taxpayers, that is, the general public, a bundle of money.

Please recognize the inadvertent error and use the relicensing legislation as the vehicle to make a comprehensive necessary reform. It is past time to cut small hydro down to size.

Senator HECHT. Thank you very much.

Mr. David R. Conrad, water resources specialist, Friends of the Earth.

STATEMENT OF DAVID R. CONRAD, WATER RESOURCES SPECIALIST, FRIENDS OF THE EARTH

Mr. CONRAD. Thank you, Mr. Chairman. In the interest of time, I will try to summarize my summary.

Mr. Chairman, based upon the record in relicensings today, I believe in the long run the environment will be best served by a relicensing system that actually promotes some competition for sites rather than one that discourages it. Of the four bills before the subcommittee, we do not believe that S. 426 would promote much competition or therefore result in environmental improvements because of it.

Beyond competitive situations, however, I believe the environment and the public would be best served if certain mandatory minimum environmental standards and considerations were required in FERC licensing proceedings, including those in noncompetitive proceedings which constitute the bulk of cases. We have gone into this in some degree in our prepared statement, but we feel that legislation is needed to assure that at least minimum public interest standards are met in the following areas to promote development and implementation of energy conservation efficiency plans by licensees, protect, mitigate and enhance fish, wildlife, natural, and cultural resources associated with projects, to improve a variety of recreation and public use aspects of projects, to make improvements in water quality, and to mitigate for past project related environmental damages.

Mr. Chairman, both S. 426 and S. 403 rely on the Federal Power Act's current section 10(a) to make any improvements in projects. This standard has proven to be an inadequate standard, too general to cause the Commission to aggressively pursue substantial improvements that many feel are needed.

The Commission actually does no comprehensive planning, and refuses to be bound by any other appropriate plans of States or regional agencies. We are pleased and encouraged that both Senator Metzenbaum's S. 1219 and Senator Evans' S. 1260 have included clearly articulated environmental and energy conservation efficiency—energy consumption efficiency standards in their bills.

Senator Evans' bill recognizes the appropriateness of enhancement as a criteria for judging applicants' improvement plans. This is key considering the many river basins where major anadromous fish restoration and enhancement strategies are underway. Both bills quite appropriately would apply these criteria in noncompetitive relicensings as well as competitive.

Mr. Chairman, we believe also that in some conditions it would be appropriate for other agencies to set mandatory terms in hydroelectric licenses and relicenses. These include fishery and wildlife protection conditions, conditions regarding State, and wild, and scenic rivers, and other State conservation lands affected by projects, areas like State parks, and requiring Commission compliance in those instances where States or regional agencies such as the Northwest Power Planning Council have developed comprehensive hydropower plants consistent with the Commission's own requirements.

Senator Evans' bill does recognize the need for greater deference to this agency as a criteria, but only as criteria for consideration.

A couple of final points, Mr. Chairman. We strongly support the provision in Senator Metzenbaum's S. 1219, which would clarify original congressional intent to target the marketing incentives of PURPA at generally less damaging hydropower projects associated with existing dams. We would also support limiting the periods of new licenses and exemptions.

Senator Evans' bill recognizes the need for such limitation of new licenses in S. 1260. And finally, we call the subcommittee's attention to the serious need to make improvements in Commission enforcement of terms and conditions.

It does not do a whole lot of good, Mr. Chairman, to work out careful terms and conditions and not find that they are being followed, particularly conditions that relate to fishery resources, and quite a bit of our testimony deals with an area I think that calls for more attention to the enforcement issues.

The Commission would like stronger authority to enforce their licenses, and we agree with the need for it. We believe that both the compliance record of licensees and their records for making environmental improvements over the course of a license term should be made a specific consideration in relicensing.

In summary, we are unable to support either S. 403 or S. 426 as they have been drafted. We do support S. 1219 and S. 1260, which do address a number of these problems in the environmental area, and we make a number of suggestions for improvements. Thank you, Mr. Chairman.

[The prepared statement of Mr. Conrad follows:]

Statement of David R. Conrad
Water Resources Specialist for
Friends of the Earth

Before the

Subcommittee on Water and Power
of the Senate Energy and Natural Resources Committee

Regarding Hydropower Relicensing
on
S. 403, S. 426, S. 1219, s. 1260

Submitted for Hearings

June 11, 1985

SUMMARY

While the issue of which class of owners or potential owners should have the best chance to receive a new hydroelectric license upon expiration of an initial license is clearly an imporatant one, another equally important issue is what will be the criteria and conditions under which these new licenses will be issued. In many instances the public interest would require major environmental improvements at hydroelectric sites. We believe the Federal Energy Regulatory Commission is not currently giving adequate attention to the environmental aspects of its hydroelectric licensing program. The federal courts have continued to find this to be the case as well.

It can be demonstrated that vigorous competition can result in significant and necessary environmental improvements that otherwise would not be adopted. Thus we believe the relicensing process should be designed to encourage, not discourage, competition.

We believe that certain mandatory minimum environmental standards and considerations should be required for all relicensing proceedings. Thus, we recommend the following changes in law to assure proper hydroelectric regulation:

- require minimum standards and specific consideration in relicensing for--
    - energy consumption efficiency planning and performance
    - protection, mitigation and enhancement of fish, wildlife, natural and cultural resources
    - minimum flows for recreation and other water uses
    - recreational access
    - mitigation for past project-related environmental damages
    - improvements in water quality
- increase deference to conditions set by state and federal fish and wildlife agencies and restore NMFS Section 30(c) conditioning authority
- require FERC deference to appropriately developed state or regional comprehensive hydropower plans
- require FERC to consider all applicants' compliance records as a criteria in relicensing
- clarify PURPA marketing incentives applicability to existing dams and set a limitation on the term for exemptions as in the licensing-relicensing process and limit new license terms to a maximum of 30 years
- make certain improvements in Commission monitoring and enforcement authority

Considering the above criteria, Friends of the Earth would not support S. 426 as currently drafted. The bill would neither induce competition regarding environmental factors nor set needed environmental protection criteria to guide relicensing proceedings. Nor does the bill address other environmental concerns raised in our testimony.

While S. 403 might promote some degree of competition for sites, and therefore might result in some environmental improvements, the bill also does not include needed environmental criteria.

Friends of the Earth would support both S. 1219 and S. 1260 as relicensing bills that more clearly address environmental concerns. Improvements consistent with the above critera are proposed.

Mr. Chairman and members of the Subcommittee my name is David R. Conrad. I serve as Washington Representative and Water Resources Specialist for Friends of the Earth. I appreciate the opportunity to present the views of Friends of the Earth regarding the critical issue of relicensing of hydroelectric power projects by the Federal Energy Regulatory Commission. It is the hope of conservationists across the nation that these efforts will result in positive, farsighted reform measures that will assure the future of environmentally sound hydroelectric power development.

General Issues

Mr. Chairman, public dialogue to date regarding relicensing of hydroelectric power projects has been focused on which class of owners or potential owners under various pieces of legislation will have the best chances at winning a new hydroelectric license once an original license expires. While this is obviously a significant issue, I believe an equally and potentially more significant issue is what should be the circumstances and conditions under which the new licenses will be issued.

In the course of hearings last year in the House of Representatives on both relicensing and the Commission's small hydro programs, national conservation organizations as well as state and federal fish and wildlife agencies, tribes, and others, such as the Northwest Power Planning Council, submitted testimony on the historic and current bias of the Commission against the protection of non-developmental amenities associated with the nation's waterways, and the serious problems which this bias has caused and may yet cause for natural resource management. We contended that any legislation which addresses hydroelectric licensing or relicensing should be accompanied by amendment language, spelling out much more clearly the roles and responsibilities of the Commission and other state and federal agencies to protect and enhance environmental values. We continue to believe this should be the case.

In preparing for the House oversight hearings last fall, national conservation organizations found numerous serious failings and weaknesses in in the Commission's hydropower programs that could ultimately result in major adverse environmental impacts to the nation's river resource base. A number of these failings are inherent in the current processes by which the Commission handles its relicensings responsibilities. They include: insufficient consideration being given to natural resource values in issuing hydropower licenses and other approvals; insufficient deference being afforded to state and federal resource agencies' plans and conditions designed to protect and enhance natural resource values; inadequate implementation of NEPA responsibilities, including analysis of cumulative effects of its actions; unwillingness to defer to appropriate comprehensive plans of state and regional agencies, while remaining unwilling to prepare its own such plans; and overbroad interpretation of its PURPA marketing and Energy Security Act exemption authorities to promote environmently damaging projects at the expense of environmental resources. I submit an attached copy of the national conservation organizations' September 11, 1984 testimony for the Subcommittee's record.

Mr. Chairman, the Courts as well have continued to support our view of the Commission's negligence towards natural resources protection. In June of last year, the 9th Circuit Court of Appeals reversed a Commission relicensing decision in Yakima Indian Nation v. FERC ("Rock Island Dam") 734 F.2d 1347

(9th Cir. 1984). In this case, the Court found unequivocally that the Commission had failed to give necessary consideration to fishery issues mandated by several statutes and that the Commission ignored the requirements of the National Environmental Policy Act to prepare an environmental impact statement. And in another case The Steamboaters v. FERC ("Winchester Dam"), Nos. 83-7444, 83-7660, 83-7705, 83-7754, (9th Cir., 1985), decided May 7th of this year, once again a Commission order issuing an exemption was reversed on grounds that the Commission had failed to adequately consider the environmental impacts of the project, especially the impacts upon fisheries.

I do not believe, despite these and a handful of other similar recent Court decisions, that much has changed at the Commission with regard to environmental sensitivity. Without certain changes in the manner and standards by which environmental considerations are made in hydroelectric regulation, hundreds of new construction authorizations and hundreds more "relicensings" may soon be approved with inadequate environmental safeguards, that individually or collectively could have major adverse consequences for the nation's environment. For instance, I would point out that the Commission staff has identified some five dozen river basins where, due to multiple project filings, potential may exist for significant adverse cumulative impacts on environmental resources. In many of these cases we are talking about the nation's prized fisheries. How relicensing proceedings will be handled in these basins could significantly affect the success or failure of fishery mitigation and enhancement plans and the public's enjoyment of these and other resources.

Thus, I would urge this Subcommittee, to take a broader view of relicensing rather than the narrow view. The appearance of a number of relicensing issues at this time also coincides with an unprecedented and enormous increase in numbers of other hydropower development proposals, affecting many of the same rivers and streams. Thus, from a practical planning standpoint it is the same resources that are involved. Any legislation which deals with relicensing questions should reflect this reality.

Competition Can Play An Important Role In Protecting And Improving Environmental Resources

While the field of cases where competitive relicensing has actually been initiated to date is small, it is obvious that in some cases environmental resources have considerably benefitted from the existence of competition. Thus, I believe relicensing legislation should be designed to promote competition, not discourage it. Such competition should include the opportunity to compete with regard to innovative plans to protect and enhance environmental values.

In the Merwin case the original licensee's application for new license had failed to include any improvements in the minimum flow regime to mitigate adverse damages to fisheries resulting from the project's operation. Only when the competitor joined the proceeding did the original licensee enter into meaningful negotiations with the competitor and the State of Washington Departments of Fisheries and Game to develop both fishery and wildlife mitigation plans and new minimum flows. Much the same occured with regard to improved recreational facilities. The Washington State Senior Assistant Attorney General stated his belief in a May 30, 1984 letter last year to the National Wildlife Federation that the agreed upon fish and wildlife mitigation measures in Merwin resulted largely and from a practical standpoint, from the existence of competition.

Also in the Mokelumne River project, competition has led to agreements by the applicants to purchase mitigation wetland habitat, to conduct needed fishery restoration studies and to make major improvements in public recreation facilities and access. In the Haas-Kings River Project competition has led to much more specific refinement of needed studies for developing improvements in water quality, recreation and fish and wildlife. The GAO letter report (GAO/RCED-84-116) of May 15, 1984 seems to support our contention about the value of competition in relicensing from an environmental standpoint.

Mr. Chairman, the environmental benefits of competition would not be realized if S. 426 is enacted as currently drafted. This is in part because the "just compensation" standard would discourage nearly any potential competitor other than the original licensee from involvement in a FERC relicensing proceeding. No such potential competitor would likely enter the uncertainty and expense of a Commission relicensing proceeding, especially under the terms of S. 426, if the prospects were that, if successful, the competitor would be forced to pay the replacement cost of the facility. Thus, we would not see any environmental improvements in projects generated because of a competitive environment.

Mr. Chairman, each of the remaining three bills before the Subcommittee, S. 403, S. 1219, and S. 1260, would be more likely, for reasons starting with their compensation provisions, to promote competition in at least some relicensing situations. We would expect this competition overall to be beneficial to the environment and would urge its retention in any Subcommittee relicensing bill. I should note that competition *per se* would not always lead to environmental improvements. For instance, competition over increased energy output could result in radical fluctuations in streamflows that could increase adverse impacts to fisheries, wildlife and shoreline recreation. (The same impacts, of course, could result from a non-competitive proceeding). Also, it is important to remember, that a relatively small portion of relicensing proceedings are likely to be subject to competition in any event (only about 10% of cases to date). Thus, I believe additional standards are absolutely required to assure adequate environmental protections are included in all new licenses issued by the Commission.

Given the Commission's poor record regarding environmental protection as graphically evidenced in the Rock Island Dam case, I do not believe we can expect the Commission to aggressively scrutinize projects to seek out optimum environmental improvements to identify the public interest, especially in non-competitive relicensing situations.

Mandatory Minimum Environmental Standards Are Needed For Both Competitive And Non-Competitive Relicensing Proceedings

Mr. Chairman, our experience with the Commission's hydroelectric licensing program leads us to the conclusion that certain amendments are needed in both the Federal Power Act and the Public Utility Regulatory Policies Act in order to restore balance to the treatment of environmental resources in hydroelectric regulation. These are needed to assure that adequate protection, mitigation and enhancement of fish, wildlife and other resources will be an integral part of both competitive and non-competitive relicensing proceedings.

The current Section 10(a) standard, as interpreted by the Commission, has not proven adequate to meet these public interest goals. This is because the Commission has chosen a mostly reactive posture for implementation of Section 10(a) [ie. in the Commission's approach, a Commission licensing or relicensing decision, made on the basis of the record presented to it, constitutes a "comprehensive plan." The Commission does not take upon itself responsibility for comprehensive planning and refuses to bind itself to other agencies' comprehensive plans]. This is also because Section 10(a) is too general a standard to bind the Commission to specific environmental policies. Thus, reliance on Section 10(a) as proposed in S. 426 and S. 403, without more specific environmental protection criteria will not provide meaningful assurances that environmental resources would receive adequate and substantive consideration in relicensing.

Environmental Plans And Electric Consumption Efficiency Programs Should Be Given Detailed And Explicit Consideration In All Relicensing Proceedings

We are pleased and strongly encouraged that both Senator Metzenbaum's S. 1219 and Senator Evan's S. 1260 have recognized the need for clearly articulated environmental protection and energy consumption efficiency standards in Federal Power Act relicensing. In addition, Senator Evan's bill recognize's the appropriateness of "enhancement" as a criteria for judging plans to improve environmental resources. This is especially important considering the intensive federal and state efforts underway to restore and enhance historically depleted anadromous fishery resources on a number of the nation's key rivers and streams, where fisheries were often initially damaged or destroyed by poorly sited, designed or operated power dams.

Both of these bills include the crucial recognition that such standards must be applied to non-competitive relicensing proceedings, as well as those that are competitive. The design of Senator Metzenbaum's bill makes it especially clear that the Commission is directed to use its Section 10(a) authority to make appropriate modifications to meet these standards and improvement criteria. I believe these kinds of criteria should be made applicable to all initial license and exemption proceedings as well.

Greater Deference Should Be Given To Terms And Conditions Set By State And Federal Fish And Wildlife Agencies

A large number of the most critical environmental issues now confronting hydroelectric regulation could be properly and fairly resolved if greater deference to state and federal fish and wildlife agencies terms conditions to protect resources under their charge were made a requirement. The Supreme Court supported the exercise of mandatory term and condition authority by federal land managers for projects on federal lands in the Escondido case last year under Section 4(e). The Congress has supported this authority for state and federal fish and wildlife agencies for exemptions, and this has been a key environmental protection clause. Hundreds of exemptions have been issued. I strongly believe extension of the Section 30(c) protections to cover licensed projects would in the long run serve hydroelectric development, by resolving and eliminating many of the most divisive environmental issues early in project planning. While none of the bills before the Subcommittee today has adopted precisely this approach, we hope this suggestion will be given serious consideration as the Subcommittee proceeds.

Senator Evan's S. 1219 most appropriately does recognize the need for greater deference in relicensing to be given to state, federal, and tribal fish and wildlife agencies, other recreation and development agencies, and to state or regional comprehensive plans where they exist. The Commission's hydroelectric licensing program will run much more smoothly if the Commission is directed to give appropriate deference to these agencies' plans for the water resources that they administer.

It should be clear that at least in certain instances the required deference should not be simply a "consideration," but should be mandatory, except under extraordinary circumstances. Examples that should be subject to mandatory deference, in addition to fish and wildlife conditions, would be for projects having direct, adverse effects on designated state wild and scenic rivers, state parks, or in instances where a state or regional agency (such as the Northwest Power Planning Council) has developed an appropriate, comprehensive plan that fully integrates the public interest criteria that the Commission is required to consider under Section 10(a).

Mr. Chairman, one concern we do have is with the timetable established in Senator Evan's bill. The three-year period may prove too short to accomplish needed fish and wildlife studies in order to set proper conditions for new licenses. Given that more than 170 licenses will enter relicensing proceedings within the next eight years, an expert with the United States Fish and Wildlife Service recommended that a major effort encouraging implementation of these studies should begin immediately and predicted some could take as long as five to seven years.

Other improvements in standards that should be considered in developing this legislation would include:

1. clarifying applicability of Section 18 to adequately protect downstream as well as upstream fishery migration

2. assure that a potential licensee's record of compliance with the conditions of its license (or licenses) and its record in making environmental improvements over the course of the term of its license is a consideration in competitive relicensing.

PURPA's Marketing Incentives Should Be Clarified To Apply To Existing Dams Only And Exemptions Should Be Limited To Specific Terms Similar To Hydroelectric Licenses

Mr. Chairman, in addition to the above, I believe that legislation is needed to clarify original congressional intent regarding the application of marketing and avoided-cost benefits of PURPA to projects associated with existing dams only. This is relevant to many projects facing relicensing given the context of potential for cumulative environmental damage by other PURPA-induced projects in these same river basins caused by the Commission's overly expansive reading of PURPA. Such language has been included in Senator Metzenbaum's S. 1219 and we would strongly support it.

Also, when the Congress established the hydropower exemption program in PURPA in 1978 and the Energy Security Act in 1980, virtually no public discussion was had over the long-term implications for the water resources of this nation. The exemptions, unlike licenses, amount to a permanent grant of right to use public water resources. I believe the long-term public interest would best be served if, similar to licenses, a maximum term would be set of 20 to 30 years, subject to review similar to a relicensing process, for exempted projects located on natural streams. This would require legislation.

Mr. Chairman, such a maximum term would recognize that demands on the nation's water resources are constantly changing and that the public needs to retain some degree of control over water resource developments in order to be able to respond to such changes. Similarly, Senator Evan's S. 1260 would limit new license terms to a maximum of 30 years under normal circumstances. We would support such a limitation for the same reasons.

National Marine Fisheries Service Should Be Specifically Identified Among Fisheries Agencies With Mandatory Conditioning Powers Under Section 30(c) Of The Federal Power Act

An additional concern we have regarding the Commission's exemption program is that the National Marine Fisheries Service is currently barred from being able to set mandatory terms and conditions on exempted hydroelectric projects. This became an issue in the Winchester Dam case, recently decided by the 9th Circuit Court of Appeals. Since NMFS has major responsibilities to protect and enhance our sport and commercial anadromous fisheries, it makes little sense for this agency to be relegated simply to an advisory position with respect to the commission.

Commission Enforcement of License Conditions Needs To Be Improved

Finally, any relicensing legislation should be accompanied by legislation to help assure that carefully worked out terms and conditions for new licenses are strictly enforced. A growing amount of evidence has shown that violations of license conditions for environmental protection have almost always gone unpunished. California environmental and sport fishing organizations have identified chronic violations of minimum stream flow requirements that span many years on numerous streams. In at least one case, a complaint filed by California's Friends of the River remained unresolved for some four years and the licensee apparently has still remained out of compliance in recent months. This licensee has apparently been out of compliance a significant amount of the time for the past 20 years, despite complaints being filed by state and federal agencies on several occasions. As a result, aquatic life in the river downstream is in extremely poor condition.

Mr. Chairman, in last September's hearings, the Chairman of the Commission alluded to his concerns over enhancement problems by recommending that the Commission be granted authority to initiate court proceedings for fines and license revocations as enforcement tools, rather than being required as in current law to refer all such actions to the Justice Department. This would seem to be a reasonable suggestion. In addition, we recommend establishment of a citizen suit provision along the lines of the Clean Water Act to help supplement the Commission's enforcement efforts.

Conclusion

In conclusion, Mr. Chairman, on the basis of the criteria I have articulated in my statement, Friends of the Earth would have to oppose S. 426 as currently drafted. The bill would neither promote competition nor set needed environmental protection criteria to guide relicensing proceedings.

It also fails to address other concerns we have discussed regarding the Commission's hydropower regulation program.

We would also be unable to support S. 403, because while it is possible the bill might promote a degree of competition, it contains no guidance to the Commission regarding environmental protection responsibilities and again fails to address a number of important hydropower issues.

We would support both S. 1219 and S. 1260 as legislation that much more clearly address the environmental concerns we have expressed. While these bills are not identical, each contains important elements that would improve the Commission's hydroelectric licensing program in valuable ways. Each could also be improved along the lines we have suggested in this statement.

This concludes my prepared statement, Mr. Chairman. I appreciate once again the opportunity to present Friends of the Earth's views on relicensing legislation and stand ready at any time to work with the Members of the Committee or your staffs to further refine for legislative purposes any of the ideas we have proposed. I would be happy to answer any questions the Members of the Committee might have.

Thank you very much.

ATTACHMENT A

Relicensing Hearings,

June 11, 1985

TESTIMONY OF DAVID R. CONRAD

ON

SMALL HYDROPOWER REGULATION BY THE FEDERAL ENERGY REGULATORY COMMISSION

PRESENTED ON BEHALF OF:

AMERICAN RIVERS CONSERVATION COUNCIL
ENVIRONMENTAL ACTION
ENVIRONMENTAL POLICY INSTITUTE
FRIENDS OF THE EARTH
FRIENDS OF THE RIVER
NATIONAL AUDUBON SOCIETY
NATIONAL PARKS AND CONSERVATION ASSOCIATION
NATIONAL WILDLIFE FEDERATION
SIERRA CLUB
WILDERNESS SOCIETY

BEFORE THE SUBCOMMITTEE ON ENERGY CONSERVATION AND POWER

HOUSE ENERGY AND COMMERCE COMMITTEE

For Hearings On

September 11, 1984

Presented by David R. Conrad
Water Resources Specialist
Friends of the Earth
530 7th Street, SE
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Summary of Testimony

While national conservation organizations are not opposed to the development of small hydropower, we question the FERC's ability to adequately consider and make the necessary public interest determinations on the unprecedented numbers of hydropower applications now flooding the agency. In "expediting" the processing of applications, the Commission has: 1) failed to fully involve the public in its deliberations, 2) failed to prepare the necessary comprehensive plans to assist its licensing under Section 10(a) of the Federal Power Act, 3) refused to conduct cumulative impact analysis in basins with numerous concurrent pending development applications, 4) failed in the past 5 years to bring its NEPA regulations into conformance with the CEQ NEPA regulations, and 5) often overreached its authority in attempting to promote hydropower development, often at the expense of environmental protection.

We recommend certain improvements be made in the Commission's small hydropower programs, including:

1) require public comment deadlines for applications to be keyed to _Federal Register_ notice dates and require improvements in public participation by the Commission; 2) enhance the Commission's comprehensive planning responsibilities by allowing states or other appropriate planning entities to develop and submit comprehensive plans for FERC's approval to guide licensing activities, subject to specific criteria defining adequate plans and planning processes; 3) give the Commission specific legislative guidance on non-power generation factors to consider in hydropower licensing; 4) require the Commission to consider cumulative impacts of its hydropower

program activities, where appropriate, and direct the Commission to finalize its NEPA regulations in conformance with the CEQ NEPA regulations; 5) clarify that financial incentives of Title II of PURPA should be targetted only to projects associated with existing impoundments, and; 6) increase Commission statutory deference to state regulatory programs in certain circumstances, and make improvements to help assure adequate enforcement of license and exemptions terms and conditions to protect fish, wildlife, and other public interest values.

I. Introduction

Good morning Mr. Chairman and members of the Subcommittee. We wish to thank the Subcommittee for scheduling these oversight hearings on the federal small hydroelectric power programs. We also want to thank the Subcommittee once again for conducting an oversight inquiry into the small hydropower area through Chairman Ottinger's letter to Federal Energy Regulatory Commission Chairman Ray O'Connor in December of 1983. It is the hope of national conservation organizations that these hearings will lead to further congressional followup both in legislation and suggested administrative initiatives to make important changes in federal incentives and Commission and other federal agencies' programs for regulating small hydropower development.

We must say at the outset of these hearings that national conservation organizations are certainly not opposed to the development of hydroelectric power. Many hydropower projects can be developed with minimal adverse environmental impacts and can provide the public with benefits of valuable renewable energy. It is extremely important to recognize, however, that the siting, design and operation of hydropower projects is critical to whether or not such projects can be called environmentally benign. National conservation organizations are seriously concerned that the current regulation of hydroelectric power developments is not adequately meeting the challenge of assuring that proposed and approved developments are in the public interest. We are also concerned that the recently enacted federal small hydropower incentives, and the manner in which the Commission has implemented those incentives, have not been carefully enough directed at the particular projects and circumstances that would produce the types and numbers of projects that would be considered in the public interest.

II. General Overview, Commission Small Hydropower Authorities, Record To Date, Major Environmental Concerns

There can be no doubt that due to several factors, the hydroelectric power workload of the Commission and overall interest in small hydropower has dramatically increased since the mid to late 1970s. Besides a significant overall increase in the price of energy, Congressional enactments are generally agreed to be the major causative factor in the huge surge in hydroelectric development applications. Significant hydropower legislation enacted between 1978 and 1981 includes: the Public Utility Regulatory Policies Act, the Energy Security Act, the Crude Oil Windfall Profits Tax Act, the Northwest Electric Power Planning and Conservation Act ("Northwest Power Act"), and the Economic Recovery Tax Act. These laws collectively have reduced marketing and regulatory barriers to the development of hydropower, authorized the Commission to create a simplified and expedited program of handling hydropower development applications, authorized the Commission to exempt certain projects from licensing requirements under the Federal Power Act, and authorized a variety of tax incentives to promote hydropower development. The Northwest Power Act has helped establish a regional power planning process which is attempting to rank hydroelectric power resources among other sources of energy in the Pacific Northwest. States have also enacted laws and made program changes that have contributed to the increased attractiveness of investment in hydroelectric development.

Over the past few years, the Commission has responded to the unprecedented flood of applications with major changes in its regulations aimed at simplifying and expediting the handling of hydropower applications. It has been difficult for the public and other federal, state and local agencies to keep up with the changes in the FERC's processes while at the same time responding to the increasing numbers of project proposals. And it must be noted that the Commission's rules for public involvement in hydropower proceedings are quite complex, in any event, and this too has served as a source of significant frustration, especially for many who have had limited previous experience with the Commission.

A number of FERC's procedural changes have been beneficial. In particular, the decision to require a prospective applicant's consultation with federal, state and local agencies prior to filing license or exemption applications with the Commission has had the positive effect of bringing many resource agencies into the project planning process much earlier. However, actions such as the decision to eliminate free mailings of hydroelectric project notices, proposed rulemakings and other Commission documents to the general public has made it considerably more difficult for many to participate in the Commission's proceedings. Further, as will be detailed below, the Commision has gone far beyond mere expedition, to the exclusion of procedures essential to a reasoned determination of whether a project is truly in the public interest.

While the Commission's workload has expanded manyfold, its staffing has not grown proportionately, and really has not grown much at all. For instance, in the Spring of 1981, the Commission's hydropower environmental analysis staff consisted of 33 personnel [1], while 3 years later the staff had only grown to a total of 35.[2] During the same period the number of small hydropower license and exemption applications had grown six-fold (62 applications accepted in 1980 vs. 377 applications in 1983). (Answers, p. 6, 9) Although the Commission has requested a $2.2 million increase in operating expenses for hydropower licensing in 1985, this would not appear to be sufficient to adequately handle the influx of more complicated license and exemption applications predicted. The Commission notes in its budget submittal that nearly half the increase would go to only 3 environmental impact statement reviews, including additional EIS funding for the giant Susitna Dam project in Alaska.

Such statistics as well as our own experiences and recent court cases have left many members of the public seriously concerned about the ability of the Commission's staff to carry out its mandated responsibility in Section 10(a) of the Federal Power Act, that all licensed projects it approves:

> "...will be best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce, for the improvement and utilization of water power development, and for other benficial uses, including recreational purposes..."

At the very time when the Commission should be making a strong effort to

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[1] NEPA In Action, Environmental Offices in Nineteen Federal Agencies, A Report to the Council on Environmental Quality, Executive Office of the President, Environmental Law Institute, October, 1981, p. 134.

[2] see Commission Answers to the Subcommittee ("Answers"), February 17, 1984, p. 20

identify on a national basis those remaining river segments which should not be developed for hydroelectric power because of their special or outstanding values, and to identify for other places the optimum amount of hydroelectric development given other water and land use needs, the Commission is instead bearing down with a full steam ahead approach to license or exempt practically all project applications which it receives and accepts for filing. The numbers in Answer A.1. of the Commission's Answers are illuminating in this respect. When one compares the number of applications accepted or expected to be accepted with the number of projects licensed or exempted or expected to be licensed or exempted, taking into account the processing times for applications, it becomes clear that the Commission expects to ultimately license or exempt 90% to 100% of all projects. We are concerned that an assumption that virtually all proposed projects will be licensed will not necessarily lead to ultimate development that is truly in the public interest.

These concerns are shared by a broad spectrum of the public. Many of the project applications call for developments on anadromous fishery streams, on recreational boating streams, in sensitive national forest areas, in scenic canyons, and in downtown areas where businesses depend on the aesthetics of cascading water to help attract customers.[3] Attempts which have been made by other planning agencies, states, environmental organizations and Indian tribes to get the Commission to make special efforts to do basin-wide planning and to consider potential cumulative impacts where multiple numbers of projects in the same basins have been proposed have not been successful. The Commission instead appears to be making attempts to diffuse these issues rather than confront them.

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[3] For instance, some 50 small hydropower proposals are currently pending before the Commission on Idaho's Salmon River and tributaries. These projects, if developed, could potentially have major adverse environmental impacts on one of the state's prime salmon fisheries and recreational tourism streams. More than a dozen other Northwest and California river basins face similar problems.

Also, in a recent case on New York State's Black River at Watertown, NY, the Commission has licensed one small hydropower project and is considering another license on one of the best whitewater rafting recreational areas in the New York--New England region. The projects were proposed at fully breached, former damsites. If constructed, the whitewater recreation industry that has developed there would have to be closed and a major, highly unique public resource would be lost.

In two other cases, cities whose economic well-being depends on the aesthetics of cascading waterfalls through their midsts, have been threatened by potential small hydropower development. The City of Winooski, Vermont is being threatened by a 12 MW hydropower project proposed by the Burlington, VT, Electric Department on the Winooski River. The project would virtually dewater the river and a falls over an old mill dam, damaging the aesthetics of the river which has become a focal point for the city's federally-assisted urban renewal project. Also, at Jackson Falls on the Wildcat Brook in New Hampshire, the Commission issued a permit to study hydropower development affecting the river falls which is a key tourist attraction in the town. Despite pleadings to FERC by the town and New Hampshire's congressional delegation not to consider the application, the permit was granted. Congress has since moved to temporarily halt further consideration of the project by making the river a study river in the Wild and Scenic Rivers system.

Additionally, other proposals in New Hampshire to reconstruct two breached dams in the Merrimack River Basin pose threats to interstate cooperative efforts to restore Atlantic salmon and American shad anadromous fish runs.

Concerning national forests, the U.S. Forest Service notes that large numbers of hydropower project applications are being received at the FERC for projects proposed to be located on national forest lands. In a February 14, 1984 letter to Mr. Christopher H. Meyer of the National Wildlife Federation, Acting Deputy Cheif of the U.S. Forest Service J. B. Hilmon stated that

> "(a)n extrapolation of data derived from an analysis of applications for license or amendment of license received during the past four years indicates that in the next decade some 3,000 applications will be filed with the Federal Energy Regulatory Commission that will affect National Forest lands...."

Such a large number of projects would undoubtedly have a profound and lasting impact on the resources of the national forest system, even if only a moderate percentage are actually constructed.

This practice of diffusing complicated development planning issues in order to proceed unrestrained with project approvals is evident in the Commission's recent series of orders issuing licenses and exemptions and denying numerous requests for consolidated proceedings in northwest river basins where large numbers of project applications are simultaneously pending before the Commission (see Cumulative Impacts). In essence the Commission has constructed a scheme of legal reasoning to absolve itself of responsibility for consolidating all pending applications within a river basin in order to determine whether its licensing or exemption actions would lead to significant adverse cumulative impacts. If such policies are allowed to continue unchanged, major damages to fisheries, wildlife and aesthetic resources can be expected.

Finally, along with our concern that the Commission may be inadequately staffed to accomplish the small hydropower mandates Congress has vested in it, we are also concerned that the Commission has not been given sufficient legislative guidance on how it should interpret those mandates. On the one hand, the Commission has a mandate to regulate small hydropower development in the context of balanced water resource development. On the other hand, although it is far less clear that Congress intended such a mandate, the Commission feels a responsibility to promote small hydropower development, at least through expeditious processing of applications and its other authorities. Explicit direction may need to be given to the Commission regarding how much and what kind of emphasis should be placed on public interest values other than electric power generation.

The Commission Has Been Guilty of Overreaching Its Legislative Authority in Promoting Hydroelectric Power Development.

In providing encouragement to hydropower development, the Commission has been notably guilty of overreaching its legislative authority. First, the Commission has made a fundamental decision to change the nature and scope of hydroelectric power projects that are being promoted on the nation's rivers and streams. In issuing its rules governing the eligibility of hydroelectric facilities for federal incentives to small power producers authorized in Sections 201 and 210 of the Public Utility Regulatory Policies Act of 1978 (PURPA), the Commission expanded the universe of hydropower projects (80 MW or less) that might be eligible from only those projects associated with existing dams to projects utilizing new dams or impoundments as well, ignoring clear language in the PURPA Conference Report applying PURPA benefits only to "hydroelectric facilities at existing dams."[4] Congress recognized at the time that projects associated with existing dams generally have less severe environmental impacts than projects involving wholly new impoundments. The Commission's action represents a major step in promoting new dam construction, in direct contravention of its congressional mandate.

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[4] H. Conf. Report No. 1750, 95th Cong., 2d Session(1978), reprinted in 1978 U.S. Code Cong. and Adm. News 7797, 7823

Large numbers of new diversion-style hydroelectric power projects, with especially heavy concentrations in the western states of California, Idaho, Washington and Oregon, have arisen in part due to this expansive rulemaking.

Also, the Commission has overreached in interpretion of its authority regarding licenses and exemptions, with the effect of restricting other agencies from exercising their environmental protection authorities. The Commission's rules regarding categorical exemptions were recently challenged in court for unduly restricting state and federal wildlife agencies from imposing terms and conditions to protect fish and wildlife resources. The court remanded the rulemaking to the Commission, which stayed the rules on June 15, 1983.

The Supreme Court ruled against the Commission's interpretation of Section 4(e) of the Federal Power Act in Escondido Mutual Water Company v. La Jolla, Rincon, San Pasqual, Pauma and Pala Bands of Mission Indians, et. al., No. 82-2056, May 15, 1984, upholding the position of the Department of Interior that the Secretary has the authority to impose conditions in FERC-issued licenses to protect the resources of reservations under his jurisdiction and that these conditions should not be subject to FERC modification. Also, in the recent Tulalip decision[5], the 9th U.S. Circuit Court of Appeals held invalid the Commission's natural water feature exemption rule. This rule had extended the application of the 5MW exemption under the Energy Security Act to include hydropower projects that utilize new dams or impoundment structures (not greater than 10 feet in height) to divert water for hydroelectric purposes. Some 297 exemptions or pending exemption applications will be affected in some way or another by the Court's ruling.

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[5] see Tulalip Tribes of Washington v. FERC, Nos. 83-7139, 83-7140, 83-7149, 9th Cir., May 10, 1984.

In addition, even in light of the Supreme Court's Escondido decision, there are examples where the Commission is still insisting on reserving for itself any final determinations on approvals of fish passage facilities prescribed by the Secretary of Commerce or Interior under Section 18 of the Federal Power Act. (see Orders On Appeal Amending Licenses, June 25, 1984, Hollywood Project, #3024, and Byrd Park Project #3029, City of Richmond, VA).

National conservation organizations' concerns about the Commission's small hydropower programs are further heightened when considering the policies which appear to underlie them. In the preamble to the Commission's recent proposed rulemaking, further revising hydropower licensing and exemption procedures, the Commission described its version of its licensing responsibilities under Section 10(a) of the Federal Power Act. The Commission states:

> "The Commission is responsible for regulating the non-Federal development of water resources to provide for the most comprehensive development of hydroelectric power." (Emphasis added)[6]

To say that the Commission is charged with giving the nation the "most comprehensive development of hydropower" consitutes a gross misreading of the Commission's 10(a) mandate to do balanced water resources conservation and development, but it seems to aptly describe the overall actions of the Commission when taken in aggregate. In contrast, in 1967 Justice Douglas wrote for the Supreme Court, characterizing the Commission's 10(a) licensing responsibilities:

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6. 49 Fed. Reg. 44, 8016, (March 5, 1984)

> "A license under this Act empowers the licensee to construct for its own use and benefit, hydroelectric projects utilizing the flow of navigable waters and thus, in effect, to appropriate water resources from the public domain. The grant of authority to the Commission to alienate federal water resources does not, of course, turn simply on whether the projects will be beneficial to the licensee. Nor is the test whether the region will be able to use the additional power. The test is whether the project will be in the public interest. And that determination can be made only after an explanation of all issues relevant to the 'public interest', including future power demand and supply, alternative sources of power, the public interest in preserving reaches of wild rivers and wilderness areas, the preservation of anadromous fish for commercial and recreational purposes, and the protection of wildlife." (Udall v. FPC, 387 U.S. 428, p. 440)

The Supreme Court has several times since relied on this interpretation in subsequent rulings in Federal Power Act-related cases.

From our perspective, it would appear that Congress needs to give the Commission clearer and more specific guidance regarding its environmental and public interest responsibilities in small hydropower regulation. Thoughtful, prospective, comprehensive river basin planning must become a major part of the Commission's activities and must be made to underlie all hydropower permit and construction authorizations the Commission issues. This may be facilitated by giving a greater substantive role to states and other federal agencies, emphasizing the areas where they have greater expertise and capability. We urge the Subcommittee to consider the following specific comments on issues raised in the Commission's Answers and to further consider our suggestions for areas where legislative changes would assist in restoring environmental balance to the Commission's small hydropower program.

III. Specific Comments Regarding Major Procedural and Institutional Issues Raised in Answers of the Commision to Chairman Ottinger's Dec. 21, 1983 Inquiry to Chairman Ray O'Connor.

A. Notice and Public Participation

While public notice problems regarding the Commission's small hydropower programs may pale in comparison with some of the larger planning concerns, serious problems continue to exist. In 1981, as a budget cutting measure, the Commission eliminated its mailing service to the general public which had expressed interest to the Commission in receiving notices of applications, new order issuances and rulemakings. The means now available to obtain these materials are an expensive private service, and notices in a FERC subscription publication and the *Federal Register*. Notices in the latter two publications are batched and considerable time often elapses before the public can receive notice of an impending comments deadline.

Comments deadlines are tied to the dates that legal notices run in a local newspaper near a project rather than to the date of the *Federal Register* notice. Quite commonly more than half of the 60 day comments period for hydropower application will elapse prior to *Federal Register* publication. Mailing times further restrict the practical public input period. And there are still many instances reported of "slip-ups" in mailings to commenting agencies. In order to give the public the fullest reasonable opportunity to comment on applications, Congress should direct that comments periods should begin upon the date they are published in the *Federal Register* and be a minimum of 60 days in length.

Another substantive concern regards evidentiary and non-evidentiary hearings in Commission proceedings. Hearings are often requested by intervenors in license and exemption proceedings, but are seldom granted.

The appalling fact elicited in Commission answer C.3.a is that in 7 years (1977-1983) and 6,328 applications for hydroelectric licenses, permits and exemptions, the Commission has only conducted 16 evidentiary hearings. This highlights a major flaw in the Commission's processing of hydroelectric applications, since under the Federal Power Act and the due process clause of the U.S. Constitution, the Commission has a duty to afford interested parties adequate opportunity to resolve any material issues of fact which may arise. Also the Commission has not provided in its regulations for any middle ground between a trial-type hearing and no hearing at all. Thus in the vast majority of cases no hearings are held. *

A recent licensing case on Androscoggin River near Berlin, NH, Pontcook Project (No. 2861) illustrates how the Commission's disinclination to conduct hearings has led to serious distrust of the agency's sincerity in determining "the public interest." The 8.5MW project was clearly the most controversial hydropower project in the state, threatening major damage to one of the most popular fishing and recreational boating streams in the region. It had collected numerous intervenors and the controversy was heavily publicized in the state's media. Even though clear disputes existed over the degree of harm that would result to recreation and fish and wildlife resources in the area, the Commission staff proceeded without a hearing to license the project in October of 1981. When the staff decision was appealed to the Commission, the license was eventually upheld, still without a hearing.

The Commission should make a much greater effort to involve the public, yet judging from its suggestion in answer C.4 that it would like to reduce its expenses for newspaper notification, it appears the Commission's inclination is to do less, not more.

B. Consultation With Federal and State Fish and Wildlife Agencies

In their answer to question D.1.e regarding whether the Commission feels there is adequate time for fish and wildlife agencies to carry out their duties under the exemption process, the Commission states that "the problems faced by state agencies appear to be related to the large numbers of applications filed during the last 3 years, rather than the time frame provided for individual project review." (Answers, p. 32)

We have doubts that this is correct. Many state and federal fish and wildlife biologists have told us that often there is a strong need to conduct biological studies that simply cannot be conducted in 30 or 60 day periods allowed in the FERC proceedings. The need for such studies becomes more acute when multiple numbers of developments have been proposed within a river basin. Since the Commission generally chooses to exempt projects, fish and wildlife agencies must require post-construction studies to further consider mitigation needs. After construction, the flexibility of project design and siting is extremely limited. The same problems are experienced in licensing situations. This issue arose in the recent Rock Island Dam relicensing case on the Columbia River in Washington State.[7] The 9th Circuit U.S. Appeals Court ruled that the Commission could not issue a new license for a dam on the Columbia River without first seeing to it that the necessary fisheries studies were conducted. While this is not a small hydropower project, the principle, nevertheless, is the same.

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[7] Confederated Tribes and Bands of the Yakima Indian Nation v. FERC, 734 F. 2d, 9th Cir., 1984.

C. Comprehensive Plan Requirement

One of the greatest failings of the Commision's hydropower program is its lack of any positive program to identify the current and optimally appropriate levels of hydropower development in each region and in individual river basins, in light of both power needs and context of all other water resource needs.

The Commission's answer describing its Section 10(a) compliance procedures (Answers, F.1.a) has essentially defined a "comprehensive plan" as the Commission's evaluation of the materials included in a project docket when it makes its licensing decision. We find this definition represents a near complete dereliction of the Commission's responsibility to conduct integrated water resource planning studies to guide its hydropower licensing. With the prospect of thousands of project proposals to consider in the coming years, the strongest need currently exists for legislative direction to the Commission to begin conducting integrated hydropower planning studies. Without such comprehensive planning, development will continue in a piecemeal fashion and valuable fish, wildlife, recreational, aesthetic, historical and cultural resources will be unnecessarily damaged or lost. Without this planning more cities and towns like Winooski, Vermont and Jackson, New Hampshire, that have developed urban renewal and recreation plans centering on water falls and cascades to bolster their cities' economies, will be adversely affected by poorly sited developments. And the nation may also suffer an irretrievable setback in its efforts to preserve part of its dwindling supply of wild rivers under the Wild and Scenic Rivers Act.

The Congress has recognized the need for such planning in the Northwest Power Act and several states have begun various levels of hydroelectric power planning to guide their own decisionmaking. It should be pointed out that many states' river basin commissions and other federal agencies may have far greater capabilities than the FERC to execute this kind of planning, but thus far the Commission has frustrated their efforts by failing to bind itself in any way to other agencies' plans. This attitude could have precisely the opposite of the desired affect of encouraging better planning by stifling the initiatives of other agencies to conduct such planning.

Due to overall budget cuts during the Reagan Administration, federal support for river basin planning has decreased instead of increased. As a budget cutting measure in 1981, the Administration abolished all federal river basin commissions except the Delaware River Basin Commission. It is most notable that the last major planning effort made by the New England River Basins Commission before it was abolished, was the start of a major hydropower plan, integrating all major water resource needs and values on New England rivers.

In another budget cutting decision, the Commission has all but halted production of its Water Resources Appraisal Reports, according to former Commission Chairman Butler's February 1983 testimony before the House Energy and Water Appropriations Subcommittee. Although these reports could never substitute for comprehensive river basin plans, they were useful when up to date in helping the Commission stay aware of other agencies' water resource activities within river basins.

The State of Maine has prepared legislation, S. 2361 introduced earlier this year by Sen. Mitchell, that would allow a state to develop a comprehensive plan for developing and conserving rivers within the state, relating the state's power needs, alternative power sources and other water resource needs to an overall plan for the state's waterways. If approved by the Commission, the Commission would be bound by the state's plan in future licensing decisions, subject to the Federal Power Act and all other applicable federal laws and regulations. While considerable attention must be paid to the criteria identified to develop such a comprehensive plan, legislation like S. 2361, encouraging states, river basins or possibly regional planning entities, such as the Northwest Power Planning Council, or similar legislation directing the Commission to prepare such plans where states fail to prepare them, would be an important step toward much-needed reforms in hydroelectric licensing.

D. Cumulative Impacts

Another major concern of national conservation organizations, which has been alluded to previously, relates to the potential for major cumulative effects of permitting, licensing and exemption decisions by the Commission in river basins where more than one or perhaps dozens of project proposals have been made. The Commission's *Answers* show that in February of 1984 at least 67 river basins in the nation each had at least 5 small hydropower facilities proposed in them and there were at least 20 river basins where intervenors had requested the Commission to consolidate its proceedings to conduct cumulative impact analyses.

An example of such concerns comes from one of several consolidation petitions made to the Commission by the Attorney General's office of the State of Washington on behalf of the Washington State Department of Fisheries and the State Department of Game made in June of 1983, requesting that the Commission initiate a cumulative impact assessment and comprehensive plan for the Snohomish River basin. The state argues that because some 69 small hydropower license, exemption, and preliminary permit proposals are pending in the Snohomish River watershed in western Washington:

> "It has become difficult to conduct thorough and meaningful state and federal environmental reviews of pending applications and develop suitable conditions to protect fish and wildlife resources in the Basin. Without consolidated and coordinated review in the numerous interrelated project proposals for the Snohomish watershed, the agencies and the Commission cannot properly execute their responsibilities under the Fish and Wildlife Coordination Act 16 U.S.C. Sec. 662 and other authorities. It is also evident that actual and irreparable harm will result to the Basin's natural resources if projects are authorized without considering their combined effects. The development of essential biological data and other critical information is required to do this, but it is not possible to conduct an adequate study and review within the current time frame and structure of the proceedings."[8]

Similar situations are found in many other basins in Washington, Oregon, Idaho and California. In essence the Commission is denying the petitions by piecemeal issuance of permits, licenses and exemptions.

Concern about cumulative effects is not limited to the Pacific Northwest or California by any means, however. In New Hampshire, for instance, environmentalists are concerned about license applications for three existing dam projects in the upper Merrimack River basin (two of the projects involve breached dams) that, if all constructed, may cause major damage and habitat

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8. WA State Dept. of Fisheries and Dept. of Game's Motion to the Commission for Suspension and Stay of Proceedings, June 15, 1983, In re Proj. #4218, et al., p. 2.

losses for Atlantic salmon. A major, coordinated regional attempt is being made in New England to restore nearly lost salmon runs in several New England rivers, including the Merrimack.

In the Commission's *Answers* to question G.5., the Commission promised the Subcommittee it would soon have a resolution on whether or how it would conduct cumulative impact analyses for various river basins with multiple project applications. The Commission's answer came in late March through a series of precedent-setting orders, including *Douglas Water Power Company* (P-7172-000), *Olympus Energy Corporation* (P-6617-000), *City of Seattle* (P-2959-000) and *Weyerhaeuser Company* (P-6200-000). Through these and numerous subsequent orders, the Commission has chosen to diffuse the responsibility for conducting cumulative impact analysis, arguing that the U.S. Fish and Wildlife should be responsible for analysing impacts from exempted projects. Only if a grouping of applications for licenses are "clustered in one geographical area" [9] would the Commission consider analysing cumulative impacts for pending license applications. No definition has been made for what concentration of projects would constitute sufficiently "clustered" license applications to trigger cumulative impact analysis, and it is generally believed that the Commission has no intention of conducting such analyses in the future. This situation represents an extremely serious flaw in the Commission's small hydropower regulation program.

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9. *City of Seattle*, 26 FERC 61,899, Mar. 29, 1984

E. Compliance With the Requirements of the National Environmental Policy Act

In *Answer* H.3, the Commission lays out certain facts about its performance in complying with the requirements of the *National Environmental Policy Act*. Between 1978 and 1983, a period when the Commission accepted for filing some 4741 small hydropower applications and issued some 2810 permits, licenses and exemptions for small hydropower construction approvals (including nearly 900 licenses or exemptions), the Commission prepared only 38 draft or final Environmental Impact Statements. In the most recent years, when the numbers of construction authorizations have been increasing, the annual number of environmental impact statements has plumented, down to 4 in 1983, a year in which the Commission issued 94 small hydropower licenses and 224 exemptions.

Such numbers are of serious concern to national conservation organizations. Many of the license and exemption applications represent projects that we believe would have significant environmental impacts, yet the Commission finds in practically every case to the contrary. As a result, the broader public participation and consideration of alternatives that accompanies Commission EIS's fails to materialize for almost all the projects considered by FERC.

In *Answer* H.2.(p. 49), regarding the status of the Commission's proposed new NEPA regulations (44 FR 5002, August 27, 1979), the Commission stated:

> "...The proposed rules set forth the Commission's internal procedures in greater detail in general accordance with CEQ Guidelines. Although it was not finalized, this has not materially affected the Commission's environmental review practices under NEPA."

This somewhat perplexing statement would seem to suggest that actual adoption of the 1979 proposed NEPA regulation might not amount to much more than a mere formality. In some contexts, this may well be true. However, finalizing the regulations would make a major contribution to improving and formalizing public participation through the NEPA process for small hydropower activities.

If finalized, the proposed regulations in at least six major areas would legally bind the Commission to procedures, not now encompassed in its current regulations, that would conform the Commission's NEPA procedures much more closely to the CEQ NEPA regulations. The Commission generally claims to be following the proposed regulations despite the fact that they have never been issued as a final rule. However, the Commission is clearly not following the proposed regulations in the area of cumulative impacts, and in any case is not bound to consistently follow any of the requirements that are not in its current binding regulations in 18CFR 2.80-2.82, adopted in 1972. Besides requirements for cumulative impact analysis, the five other key areas in the proposed regulations, not now in FERC's current regulations, are: 1) the requirement for *environmental assessments*, publicly noticed, with public involvement, consideration of alternatives, with the full record made part of the official record; 2) the requirement that *rulemakings* are subject to environmental review; 3) the requirement that EIS's must discuss inconsistencies between proposed actions and approved state or local plans; 4) the stated requirement that environmental information in applicant submissions that is relied upon will be verified and independently evaluated; and 5) that an EIS will generally be required for new major hydropower projects (greater than 1.5 MW) not at existing dams, unless there is a finding of no significant impact.

We can see no logical justification for the Commission's failure to finalize its proposed NEPA regulations to bring them into closer compliance with the CEQ regulations. Such finalization would in many cases result in an improved record upon which to base Commission hydropower decisions. At the same time it would provide the public with more certainty in insuring that the Commission's NEPA policies are being consistently applied. We urge the Subcommittee to urge the Commission to finalize its proposed NEPA regulations for the same reasons.

F. Exemptions

A few specific comments should be made regarding the Commission's exemption program in light of the Commission's Answers and our other experiences. A number of our organizations testified before the Subcommittee earlier this year on legislation concerning relicensing of hydropower projects. In that testimony, we pointed out the importance of the relicensing process in correcting past mistakes and making environmental improvements in the facilities and operations of licensed projects on a periodic basis. The Federal Power Act makes that period no longer than 50 years, however, the Commission sometimes grants its licences for shorter periods.

Under the Commission's exemption program, exemptions are permanent and there is no set period to review either the terms and conditions under which the project operates or the wisdom of allowing the project to continue operation in the future. Given the difficulty of predicting what the water needs of the nation may be in the future, we suggest that the exemption program be modified to provide for periodic review of hydropower exemptions -- both the project terms and conditions and the public interest in reissuance to the exemptee -- and that a specific maximum length term be established for all exemptions as required for licenses in the Federal Power Act.

Another issue pertaining to exemptions is the degree to which exemption decisions by the Commission are made outside the context of the comprehensive development plan standard that applies to other hydropower projects. The Commission stated its position in this regard in Olympus Energy Corporation, Project 6617-000, 26 FERC,61,910, March 29, 1984, that essentially it need not make exemption decisions subject to the comprehensive development plan standard, although its decisions must be made "in the public interest," and fish and wildlife agencies have the responsibility for determining what terms and conditions are necessary to protect fish and wildlife resources. Our primary concern is that this logic could lead to the Commission's ignoring the environmental interrelationships among exempted and licensed projects proposed to be located on the same water courses. This is just one more reason to encourage a comprehensive approach to water resource management where hydropower projects have been proposed.

Many of our organizations have previously testified to our concerns that the Commission's conduit exemption regulations are more restrictive than they should be from a fish and wildlife protection standpoint, while they are especially vague in helping determine that new conduit facilities are truly incidental to the water supply functions of the conduit.

In general, however, we feel the environmental aspects of the exemption process have worked fairly well, particularly where biological data has been sufficient to make responsible judgements on terms and conditions for the protection of fish and wildlife resources. Given the rising importance of balancing environmental factors when considering the location and operation of small hydropower developments, we would strongly suggest that the Subcommittee consider extending the fish and wildlife mitigation features of Section 30(c) of the Federal Power Act to all small hydropower projects that are less than 5MW installed capacity. This would help assure the environmental soundness of the nation's growth of small hydropower.

IV. Other Suggested Changes In Laws For Improving the Commission's Small Hydropower Programs

Mr. Chairman, as was stated earlier, the unprecedented numbers of small hydropower development proposals have caused many of us to revisit both the laws which collectively have encouraged the developments and the FERC's process for deciding whether and under what conditions will the projects be allowed to be constructed and operated. Because of its small staff and budget and Washington, DC location, many feel the agency is far too insulated from the direct impacts and implications of its decisions. A much greater sharing of responsibility with other state and federal resource management agencies is needed.

A. Increased Deference to States

We have suggested that legislation in the nature of the Maine hydropower planning legislation (S. 2361) could have the effect of giving states (or possibly other appropriate planning entities) a greater voice in planning future development. It must be recognized, however, that the criteria used to identify what constitutes an adequate plan for Commission approval should be explicitly spelled out in the greatest detail possible in any such legislation, and would be crucial to the success of such a planning effort. If the Subcommittee agrees, we would be happy to assist in identifying the key criteria.

In the alternative, if the Subcommittee agrees that such prospective planning is needed, but feels the Commission should be the planning agency, we believe more explicit criteria needs to be developed to give better direction to the Commission in any event. We would be happy to participate in its development.

B. State Protected River Areas and State-Imposed Instream Flow Requirements

Another area where states should be given a greater say in hydropower licensing are in situations where the states have chosen to establish programs for protection of free-flowing rivers and streams and where state policy has established instream flow requirements to protect recognized natural and cultural values.

Regarding state scenic rivers, for instance, 28 states have adopted programs to protect the natural qualities of outstanding rivers in their states. However, the programs' effects can be rendered meaningless when the Commission licenses a hydroelectric power project on the river. The state of Virginia, for example, currently is concerned about at least six pending Commission small hydroelectric power permit and license applications on rivers designated in its State Scenic Rivers system. The projects would damage both fisheries and recreational boating areas the state has specifically chosen to statutorily protect.

For another example, in a transparent attempt to circumvent the Oklahoma Scenic Rivers Act, the city of Fort Smith, Arkansas, has applied for a license for a project primarily intended for municipal water supply. This project would impound the waters of Lee Creek from a damsite in Arkansas back up into Oklahoma. The Oklahoma portion of Lee Creek is a state-designated scenic river, and it is widely recognized that a license from the FERC would present Fort Smith with the means to overcome Oklahoma state law.

It would seem appropriate for the Federal Power Act to require State concurrence in licensing for projects located in such areas. Further regarding special outstanding free-flowing river areas, we belive the Commission should be directed to give special attention to protecting those rivers that have been identified on the Nationwide Rivers Inventory referred to in Answer I.1. For a period of time, perhaps the next decade, development on these rivers might be restricted to run-of-the-river designs and only at existing dams to give the Congress the time necessary to make additions to the national Wild and Scenic Rivers system.

C. Restrict Marketing Incentives Under the Public Utility Regulatory Policies Act of 1978 To Existing Dams

As the environmental risk associated with hydropower projects involving the construction of new dams is generally recognized to be greater than that associated with existing dam projects (where that dams have not been totally breached), we strongly urge the Congress to clarify for the Commission its stated original intention that the special incentives of Title II of PURPA be applied only to projects at existing dams.

D. Restore National Marine Fisheries Service's Conditioning Responsibility Under Section 30(c) of the Federal Power Act

As a result of the Electra Power Company case (#6775-002) ("Winchester"), the Commission has ruled that the National Marine Fisheries Service, an agency in the Department of Commerce with important responsibilities for protecting and enhancing the nation's commercial fisheries resources, has been excluded from having the authority to impose mandatory terms and conditions for exemptions from licensing issued by the FERC. The ruling points out the need to explicitly include NMFS as an agency that should be granted the authority to set terms and conditions for protection of fish and wildlife under section 30(c), along with its sister agency, the United States Fish and Wildlife Service and state fish and wildlife agencies. We understand that the Subcommittee has already reported such legislation as part of a bill related to charges for non-federal hydropower use of federal dams. We strongly urge passage of this NMFS restoration measure.

E. Public Notice

In addition to the other recommendations we have made, we recommend that a provision be added to the Federal Power Act requiring the conditions of licenses and the terms and conditions of exemptions issued by the Commission be published upon their approval in the Federal Register, and that these be posted for public inspection at the project site.

F. Citizen Suits and Bonds To Help Insure Adequate Monitoring and Enforcement

Finally, recognizing that in the future the success of the Commission's small hydropower regulatory program will be judged, not only by the electric power produced, but also whether the special safety and environmental requirements placed on operators are followed as required and whether they accomplish their purposes, we make two recommendations for changes in the Federal Power Act. The first is that a citizen suit enforcement provision, similar to that of the Clean Water Act, be added to enlist interested members of the public in assuring compliance. The second would be a requirement that licensees and exemptees be required to post a bond for site maintenance or restoration to pre-licensing conditions in the event that small hydropower projects are abandoned in the future. The marginal nature of some projects suggests that plans should be made in advance for maintenance of fish passage and other mitigation that would be needed if projects were abandoned.

The Commission's record on enforcement of terms and conditions of licensed projects has left many conservationists especially disturbed. California conservation organizations have recently encountered evidence of massive, repeated violations of minimum streamflow requirements associated with several licensed projects, and a history of weak to non-existent Commission attention to their enforcement. Violations of these conditions have led to major diminishment of fish, wildlife and other values. At least in one case, conservationists filed a complaint regarding a licensed project (No. 2088) on the South Fork Feather River (CA), and now three years later, the Commission has made no response to the conservation organizations, nor have the problems been resolved because apparently violations have continued. Citizens in Wisconsin have also recently reported many violations of streamflow requirements for projects on the Flambeau and Wisconsin rivers, as well. Enforcement efforts could be much enhanced by adopting the citizen suit provision for the Federal Power Act that we have suggested.

Conclusion

We appreciate the opportunity to present our views to the Subcommittee and would be happy to further discuss any matters we have raised in our testimony. Thank you.

Senator HECHT. Thank you very much.

I have been reminded that the record will be open for 2 weeks in case anyone here wants to submit any further information for the record. Because of the tremendous number of witnesses, you were limited on your time, so any additional information can be put into the record. And when the record is printed, you will have an opportunity to get a complete copy. Many of you have come a long ways to testify, and we thank you. The hearing is adjourned.

[Whereupon, at 5:40 p.m., the hearing was adjourned.]

APPENDIXES

APPENDIX I

Additional Material Submitted by the Federal Energy Regulatory Commission

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

May 22, 1985

SENATE COMMITTEE ON
ENERGY AND NATURAL RESOURCES
RECEIVED
WASHINGTON, D.C. 20510

Honorable James A. McClure
Chairman, Committee on Energy
and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

In response to your request to Chairman O'Connor that the Commission study and provide a report on S. 403, the Hydroelectric Facility Relicensing Amendments of 1985, and S. 426, the Electric Consumers Protection Act of 1985, I am submitting the following staff comments on these bills. These comments do not necessarily represent the views of the Commission as a whole or any Commissioner. I am pleased to enclose with this report a copy of testimony prepared by Commissioner Sousa and answers to questions prepared in connection with a congressional hearing on similar legislation in the 98th Congress.

S. 403 and S. 426 amend the Federal Power Act (FPA) with respect to the relicensing of non-Federal hydroelectric projects. Both bills contain provisions addressing municipal preference, competition, and standards for relicensing, and reflect to a certain extent the decision in Pacific Power & Light Company, Opinion and Order Overruling Opinion No. 88, Reversing Initial Decision and Issuing New License to Original Licensee, 25 FERC ¶ 61,052 (1983), rehearing denied, 25 FERC ¶ 61,290 (November 22, 1983) (Merwin), which sets forth the Commission's interpretation of Sections 7(a), 10(a), and 15(a) of the FPA. In addition, S. 426 changes the standard for compensation of the existing licensee by a prevailing license challenger.

Municipal Preference:

Existing law, as interpreted in Merwin, applies the state/municipal preference of Section 7(a) of the FPA on relicensing against all non-municipal applicants other than the existing licensee.

Both S. 403 and S. 426 eliminate the state/municipal preference in all relicensing cases, whether or not the existing licensee is an applicant.

Competition at Relicensing:

Under existing law, as interpreted in Merwin, when the existing licensee is competing, the new license is to be issued to the applicant whose plans are best adapted to comprehensive development of the waterway under Section 10(a) of the FPA. No provision currently exists to break a tie between the plans of the existing licensee and a competitor should the Commission find both plans equally well adapted.

S. 403 gives the existing licensee, public or private, first option to the new license at the relicensing stage unless a competitor submits a better adapted plan. When competing plans are found equally well adapted, the tie would be broken in favor of the existing licensee.

S. 426 grants a new license to the existing licensee as long as the Commission determines, taking into account the public benefits provided during the preceding license term, that its application meets the standard of Section 10(a). If it finds that the existing licensee's application is not best adapted, the Commission would be authorized to issue a license to a competing applicant.

Standards Applied to Relicensing Applications:

Under the current law, the merits of competing proposals are judged by the Section 10(a) standard of which proposal is best adapted to comprehensive development of the waterway for beneficial public purposes.

S. 403 establishes a new standard of "better adapted to serve the public interest" and provides four criteria to be used in making the public interest determination. The Commission must consider: 1) the applicant's plans to develop, conserve, and use the waterway; 2) the economic impact on the applicant's customers if it fails to get the license; 3) the applicant's ability to operate the project efficiently; and 4) the applicant's need for the power to serve existing customers.

S. 426 uses the existing Section 10(a) comprehensive development standard, with consideration of public benefits provided during the preceding license term, to judge the existing licensee's application.

Compensation:

Current law provides that, when the original licensee is displaced, the new licensee must pay the original licensee its net investment plus severance damages. The Commission has not yet had occasion to define "severance damages."

H.R. 403 has no provision on compensation; therefore, current law would continue to apply.

H.R. 426 would require the new licensee to pay an amount determined by the Commission under due process to be just compensation.

Additional Considerations:

Both bills elaborate the statutory language of the FPA and would provide helpful guidance for the Commission in its relicensing procedures. However, there are a few areas where the bills raise questions for Commission staff, and the Committee might wish to focus particular attention on them in an attempt to avoid ambiguity:

(1) On the issue of competition, while it is clear both bills intend to and do eliminate the municipal preference in all relicensing proceedings, there appears to be uncertainty regarding what procedures the Commission would be expected to follow under the language of S. 426. The question that the language raises is whether the Commission is to judge the existing licensee's plans juxtaposed to other competitors' plans to determine if it is the best adapted plan, or if the existing licensee's plans are to be judged in isolation against a Commission-developed blueprint of what the best adapted plan should be. Congressional Record statements by Senator Wallop and by Representative Shelby, who introduced the identical bill in the House of Representatives (H.R. 44), indicate that the former interpretation, that the existing licensee's plans are to be judged against those of competitors, is intended. If so, the same procedure would be followed as in S. 403; the plans of all competitors would be judged together. The results of this process under the two bills would differ only if the plans of the existing licensee and a competitor were equally well adapted. In that case, S. 403 directs that the license be granted to the existing licensee. S. 426 does not provide guidance for a tie such as this.

While S. 403 clearly provides a preference to the existing licensee by granting it the license in the case of a tie, any preference in S. 426 would occur through consideration of public benefits provided during the preceding license term, or through the procedure imposed if the existing licensee's plans are to be judged in isolation.

(2) Additional questions are presented by the criteria set forth in S. 403 by which the Commission is to make its public interest determination. As Senator Johnston pointed out in his remarks in the Congressional Record, the first criterion is basically a restatement of the § 10(a) standard. The other criteria are likewise already subsumed under § 10(a). These criteria, therefore, are duplicative and unnecessary and may restrict the Commission's evaluation. However, if they were to be enacted, it would be helpful to have specific direction from Congress that the full scope of § 10(a) is to be included under the new standard; substantial case law exists defining the parameters of § 10(a) which would be useful in applying the new standard.

(3) The compensation standard of S. 426 is likely to provide more reasonable compensation to the existing licensee from the new licensee than would the current standard, which may not be adequate to allow the existing licensee's ratepayers to replace the generating capacity lost on relicensing. The just compensation standard would allow the Commission the flexibility to determine what the fair value of the lost project is to the existing licensee, and is more likely to ensure compensation commensurate to the actual loss in the event of a takeover than may be possible under the net investment plus severance damages compensation standard. Furthermore, by providing a standard that is not rigid in its interpretation, S. 426 allows the Commission the discretion required to assess values that will differ from project to project, a critical authority that is precluded under some compensation schemes that have been proposed. Of course, if Congress prefers a standard less open to interpretation, the specific standard to be used, such as replacement value, should be made clear in the legislation.

I hope these comments will be helpful to your committee. I will be available to discuss this legislation with you further should you desire.

Sincerely,

Christopher J. Warner

Christopher J. Warner
Associate General Counsel
Legislation, Regulation and
Congressional Affairs

Enclosures

Enclosure 1

STATEMENT OF
A. G. SOUSA, COMMISSIONER
FEDERAL ENERGY REGULATORY COMMISSION
BEFORE THE
SUBCOMMITTEE ON ENERGY CONSERVATION
AND POWER
OF THE
COMMITTEE ON ENERGY AND COMMERCE
UNITED STATES HOUSE OF REPRESENTATIVES

May 17, 1984

Mr. Chairman and Members of the Subcommittee:

I appreciate this opportunity to appear before you to discuss the background to the issue of municipal preference in relicensing proceedings at the Commission, and the three relevant bills pending before this Subcommittee. The three bills are:

-- H.R. 4402, the "Electric Utility Consumers Protection Act of 1983";

-- H.R. 5299, the "Public Interest Hydroelectric Facility Relicensing Reform Act of 1984"; and

-- H.R. 5416, the "Electric Utility Competition Act of 1984."

At the outset, I would like to emphasize that this testimony represents my own views and not necessarily those of any other Commissioner or of the Commission as a whole.

I. Background to the Issue of Municipal Preference in Relicensing Proceedings

A. Introduction

The Commission's considerations of municipal preference in relicensing proceedings have begun with the pertinent sections of the Federal Power Act ("Act"), primarily sections 7(a) and 15(a). Concerning selection from among competing applicants for a site in such proceedings, section 7(a) of the Act states in pertinent part:

> [I]n issuing licenses to new licensees under section 15 hereof the Commission shall give preference to applications therefor by States and municipalities, provided the plans for the same are deemed by the Commission equally well adapted.... (Emphasis added.)

Section 15 prescribes what the Commission shall do upon the expiration of a license. Section 15(a) states in pertinent part:

> [A]t the expiration of the original license... the Commission is authorized to issue a new license to the original licensee upon such terms and conditions as may be authorized or required under the then existing laws and regulations, or to issue a new license under said terms and conditions to a new licensee....

The relicensing issue has been, quite simply, whether the term "new licensee," as used in section 7(a), includes an "original licensee," as used in section 15(a). If it does, then the section 7(a) "municipal preference" applies against original licensees in relicensing proceedings. If it does not, then municipal preference applies only against other new non-municipal license applicants. As will be evident by the end of this section, I firmly believe that it does not.

B. Chronology

On several occasions, beginning almost 30 years ago, the Commission has publicly expressed its views on the Act's relicensing provisions.

On March 1, 1957, the entire Commission appeared before the House Committee on Interstate and Foreign Commerce. At that time, the Committee was considering a bill which would have amended section 15 of the Act to provide that an original licensee has the first option to renew its license in the event the United States does not exercise its option to recapture the project as provided in section 14 of the Act. During the hearing, Commission Chairman J. K. Kuykendall advised the Committee that the Commission thought the amendment was not necessary because the Act already provided original licensees this right. [Agency Hearings Before the House Comm. on Interstate and Foreign Commerce, 85th Cong., 1st Sess. 190 (1957).] Later that year, Chairman Kuykendall reiterated the Commission's position during hearings on his reappointment. [Nomination of Jerome K. Kuykendall to Federal Power Commission: Hearings before the Senate Comm. on Interstate and Foreign Commerce, 85th Cong., 1st Sess. 337-338 (1957).]

Ten years later, in 1967, the Commission reported to Congress that the Act confers no municipal preference when a municipality competes against an original licensee in a relicensing proceeding. In a letter signed by Chairman Lee White, and on the advice of its General Counsel, the Commission stated:

> [T]his preference applies only after it has been determined that the original licensee should not receive a new license. In those instances where the original licensee and another applicant seek a new license for the same project, the Commission believes that the new license is to be issued to whichever applicant can best meet the standards of the Act. In those rare cases where the applicants are equally matched, the Commission believes that the new license should be issued to the original licensee so long as he can meet the standards of the Act at least as well as the other applicant.

[Letter from Lee White, Chairman of the Federal Power Commission, to the Hon. John W. McCormack, Speaker of the House (August 28, 1967), reprinted in H.Rep. No. 1643, 90th Cong., 2d Sess. 6 (1967).]

The next year, Congress amended sections 7, 14 and 15 of the Act. Although those amendments pertained to the recapture of expired licenses by the United States, the Senate Committee on Commerce had heard, during the course of the hearings, considerable testimony on the question of municipal preference in relicensing proceedings. In that regard, the Committee reported that it was impressed by the testimony of the Commission, and quoted from the letter to which I just referred. [S. Rep. No. 1338, 90th Cong., 2d Sess. 3 (1968).] In addition to agreeing with the Commission's interpretation, the Committee further reported:

> Continuity of ownership and management is desirable to avoid possible interruption of service resulting from the severance of a project from an integrated system, the upsetting of existing tax patterns which are a substantial source of revenue to many communities, the dislocation of jobs, and other possible adverse results. Granting of the license to a different licensee can only be justified when the existing licensee is unable or unwilling to carry out whatever modifications are found to be necessary for comprehensive development of the waterway or to meet the standards of the act.

[Id. at 3-4.]

In 1976, the Commission had its first opportunity to consider the applicability of the municipal preference in a contested proceeding in which an investor-owned utility had applied for a new license for an existing facility. That license was also being sought by a cooperative.

Under review was a decision by a Commission administrative law judge who had held that the language of the Act clearly restricts the application of the section 7(a) preference provision to situations where the original licensee does not seek renewal. [55 F.P.C. 1276 (1975).] In its decision, the Commission declined to address the issue, which had been rendered moot by the judge's decision, affirmed by the Commission, that the cooperative did not qualify as a municipality. [Carolina Power and Light Co., 55 F.P.C. 1272 (1976).] The Commission further stated that "[t]his issue should be addressed in a proceeding where there are parties who will be affected by the application of the preference issue." [Id. at 1274.]

In 1979, the Commission was presented with that opportunity. In the summer of that year, the Cities of Bountiful, Utah, and Santa Clara, California, which had filed competing applications for projects owned and operated by Utah Power & Light Company and Pacific Gas & Electric Company, respectively, filed petitions for a declaratory order. They requested that the Commission determine formally whether section 7(a) of the Act provides a preference for municipalities who file in competition with non-municipal original licensees for a new license pursuant to section 15.

The Commission consolidated these petitions, and gave notice that it would attempt to resolve "a purely legal issue, a question of statutory construction which in no way hinges upon the facts of a particular case." ["Order Granting Interventions and Setting Briefing Schedule," City of Bountiful, Utah, Docket No. EL78-43, at 2 (May 3, 1979).] Since this declaratory proceeding involved only a matter of law, not fact, the Commission did not hold any evidentiary hearing. It did, however, solicit briefs and hear oral arguments although it was not required to do so by law. The oral argument took place on February 22, 1980.

Nineteen parties participated in the declaratory proceeding, including Clark-Cowlitz Joint Operating Agency (CCJOA), a municipality that was established in 1976 to compete for Pacific Power & Light Company's (PP&L's) Merwin Project (PP&L's Project No. 935 and CCJOA's Project No. 2791). In part, CCJOA participated by filing an initial brief, a reply brief, and a supplemental reply brief on July 30, 1979, October 10, 1979, and December 22, 1980, respectively.

On June 27, 1980, the Commission issued Opinion No. 88 -- its declaratory order construing the statute. [Opinion and Order Declaring Municipal Preference Applicable to Hydro-Electric Relicensings, City of Bountiful, Utah, 11 FERC ¶ 61,337 (1980) ("Bountiful").] In brief, the Commission determined that the same municipal preference that exists for initial licenses applies also in relicensing cases. In other words, the Commission declared that municipalities have a relicensing preference against all non-municipal applicants, including original licensees in possession of the project works.

On August 21, 1980, the Commission issued Opinion No. 88-A, denying rehearing of Opinion No. 88. [12 FERC ¶ 61,179 (1980).] Four Commissioners had voted on Opinion No. 88; on rehearing, one of the three who participated voted present. In Opinion No. 88-A, the Commission stated it had "attempted to give full effect to the general purpose of Section 7(a) in the context of Part I of the Federal Power Act, and reflected then on the lengthy and occasionally opaque legislative history." [Id. at 61,460.]

Thirty-eight privately-owned utilities appealed Opinion Nos. 88 and 88-A to the United States Court of Appeals for the Eleventh Circuit. The Court affirmed these opinions in Alabama Power Co. v. FERC, 685 F.2d 1311 (11th Cir. 1982). Recognizing that the legislative history was "weak," the court gave "great deference to the Commission's statutory interpretation." [Alabama Power v. FERC, supra, at 1317, 1318.]

In early 1983, a number of parties who had been before the Eleventh Circuit then filed a petition for writ of certiorari with the Supreme Court of the United States, seeking review of the Eleventh Circuit's decision. Traditionally, whenever the Commission has been a participant in litigation, it decides whether and to what extent it should participate before the Supreme Court. In other words, it decides what litigation position it should take. This is true whether the Commission "loses" or "wins" in the lower court.

Accordingly, on April 18, 1983, the Commission gave notice of its intent to hold a closed meeting on April 25 to develop its litigation position with respect to the petitions for writ of certiorari in Alabama Power Co. v. FERC (restyled as Utah Power & Light Co. v. FERC, S. Ct. Nos. 82-1312 et al.). The Commission closed the meeting to the public, as is customary when discussing litigation strategy, under Exemption 10 of the Sunshine Act, 5 U.S.C. § 552b(c)(10), and the Commission's regulations, 18 C.F.R. § 375.205(a)(10)(1983).

Subsequently, several individuals, including CCJOA, asked for a transcript of the closed meeting. After that request was refused, CCJOA filed suit in the United States District Court for the District of Columbia. The court affirmed the decision to withhold public disclosure of the transcript. [See Clark-Cowlitz Joint Operating Agency v. FERC, C.A. No. 83-1842 (September 14, 1983) ("CCJOA v. FERC").] CCJOA appealed the decision to the United States Court of Appeals for the D. C. Circuit (No. 83-2111). That case has been briefed but has not yet been argued.

As requested by Chairman Ottinger, a copy of the transcript of the closed meeting has been provided to this Subcommittee along with a request to protect its confidentiality. As stated in the letter of transmittal, the transcript has been provided in the same spirit that it was provided to the courts -- for in camera review but not for public release. I cannot emphasize enough the importance of maintaining the confidentiality of the transcript. Public dissemination would have a chilling effect on the Commission in trying to carry out its regulatory responsibilities, would impair its future litigation posture before the courts, and would weaken its own internal decisionmaking process. Speaking for myself, I will be very reluctant to express my views frankly and freely in future closed meetings.

The matter of the closed meeting transcript is separate from the issue of municipal preference in relicensing proceedings, and is also very important. In this regard, what is at stake is the integrity of the Commission's, and other agencies', closed meeting procedures. In enacting the Sunshine Act with its exemptions, Congress wisely balanced the public's need to know what its government officials are doing against the need for those officials to discuss privately certain matters such as litigation strategy. Since I believe this Subcommittee appreciates that balance, I am confident its members will honor the request of confidentiality.

In light of that request, any comments from me on the discussion at the closed meeting would also be inappropriate. However, I refer the Subcommittee to the District Court's decision, which has been attached to the transcript. Significantly, in regard to the propriety of the discussions at the closed meeting, the court said:

> After a thorough in camera inspection, it is evident to the Court that the April 25th meeting involved open and candid discussions concerning the possible agency positions in the pending petition for certiorari. The Commissioners met to discuss all the available options and possible repercussions with counsel and came to a final conclusion on the agency's litigation strategy. Certainly, the discussions that took place at the Commission on April 25, 1983, involved matters Congress wanted to exclude when it drafted Exemption 10 of the Sunshine Act.

[CCJOA v. FERC, supra, slip op. at 11.] In regard to the assertion that the Commission went far beyond the range of the limited exemption by discussing certain matters, namely CCJOA's pending license application before the Commission, the court said:

> What was discussed by the Commission during the closed meeting of the plaintiff's pending licensing application was entirely limited in scope. Plaintiff's application was discussed only in the context of handling the licensing preference issue. The Commission correctly limited its discussions to that of the Utah Power certiorari petition on how the licensing preference issue related to that petition.

[Id. at 13.]

Pursuant to the direction of the Commission at the closed meeting, the Commission's Solicitor requested the Solicitor General of the United States to ask the Supreme Court to grant certiorari, vacate the ruling of the Eleventh Circuit, and remand the case to the Commission. The Solicitor General requested the Court to grant certiorari, vacate the judgment of the court of appeals, and remand the case to that court for such reconsideration as it deemed appropriate. As indicated in the Solicitor General's brief, the Commission made its request because it wished to reconsider the case, and a majority of the Commissioners appeared to be ready to overrule Opinion Nos. 88 and 88-A and adopt a contrary position. On July 6, 1983, the Supreme Court denied the petitions for certiorari. [Utah Power & Light Co. v. FERC, 103 S. Ct. 3573 (1983).]

On October 6, 1983, the Commission issued Opinion No. 191, which dealt with the competing applications for the Merwin Dam hydropower project, which had been licensed since 1929 to PP&L (and its predecessor). [Pacific Power & Light Co., Opinion and Order Overruling Opinion No. 88, Reversing Initial Decision and Issuing New License to Original Licensee, 25 FERC ¶ 61,052 (1983) ("Merwin"), rehearing denied 25 FERC ¶ 61,290 (November 22, 1983).] Under review was an initial decision by a Commission administrative law judge, which had been issued three days after the April 25, 1983 closed meeting. [23 FERC ¶ 63,037 (1983).] The judge had found that PP&L's application and the application of its municipal competitor, CCJOA, were substantially the same. Applying the municipal preference, he awarded the project to CCJOA.

In Merwin, the Commission reversed the judge's decision and unanimously held that he erred in dismissing the economic impacts of the transfer of the license on the ratepayers of PP&L. The Commission found that under sections 7(a) and 10(a) of the Act, the selections of the licensee and the best adapted comprehensive plan are to be based on the same public interest standard. The Commission concluded that "the expressed scope of the [s]ection 7(a) public interest inquiry is subsumed within the broader scope of the [s]ection 10(a) public interest inquiry." [25 FERC at 61,187 (emphasis in original).] Therefore, inasmuch as section 10(a) requires the Commission to examine closely all factors affecting the public interest, the Commission considered the economic impacts of the transfer of the license from PP&L to CCJOA. Since the record evidence overwhelmingly showed that the adverse economic impacts on PP&L's customers by such transfer far outweighed the adverse economic impacts on CCJOA's customers, the Commission awarded the new license to PP&L. In this regard, even CCJOA's witnesses at the hearing testified that PP&L's customers would have to pay significantly more money than CCJOA's customers would save over both the long and short terms.

Also, a majority of the Commission, including myself, voted to overrule the Bountiful order, because we concluded it was legally erroneous. Accordingly, the majority held that the Act mandates that municipalities have a relicensing preference against all non-municipal applicants except "original licensees" in possession of the project works. In so holding, the majority pointed out that its decision was neither gratuitous nor obiter dictum even though the Commission had found unanimously that the new Merwin license should be issued to PP&L. Firmly believing that the Bountiful decision was erroneous, the majority wanted to ensure that the correct preference provisions would be applied in future relicensing proceedings, a number of which were pending at that time.

In addition, the majority found no legal impediment to overruling Bountiful. First, an agency may clarify or reverse a prior statutory interpretation, even one of longstanding duration, provided the agency identifies the interpretation with which it disagrees and articulates its rationale. This is particularly true where the initial interpretation was not arrived at in the context of a fact-based proceeding. Second, the Supreme Court had not ruled on the merits of the Eleventh Circuit's affirmance of the Commission's erroneous Bountiful decision. As the late Justice Felix Frankfurter said, denial of a petition for a writ of certiorari means:

> [F]ewer than four members of the Court thought it should be granted.... [A] denial carries with it no implication whatever regarding the Court's view on the merits of a case which it has declined to review. The Court has said this again and again; again and again the admonition has to be repeated.

[Maryland v. Baltimore Radio Show, Inc., 338 U.S. 912, 919 (1950), quoted in Opinion No. 191, 25 FERC at 61,178.]

C. Conclusion

In light of the potential impact of relicensing on American consumers, it was incumbent on me to help correct what I saw as a serious error. In brief, that error was a misinterpretation of sections 7(a) and 15(a) of the Act by my predecessors on the Commission. As I indicated earlier, the meaning of those sections is plain. Section 7(a) directs a preference to states and municipalities in issuing licenses under section 15(a) to "new licensees." Section 15(a) makes a clear distinction between an original licensee and a new licensee. The language of sections 7(a) and 15(a) leave no doubt in my mind that the preference is available only when the original licensee does not seek renewal of its license.

Fortunately, the administrative process in this country provides for flexibility and the opportunity for regulatory bodies and other decisionmakers to reconsider their decisions. Those provisions are healthy and important aspects of our system of government. However, there is also a need for certainty. The people subject to regulations and laws would be ill served by their government officials if those officials ignored that need. Therefore, it was also incumbent on me to try to provide some certainty in the area of relicensing, which potentially affects literally millions of ratepayers throughout the country. Inasmuch as the

Bountiful decision was a declaratory order which by definition neither gave anything to nor took anything away from anyone, its reversal was required at the earliest possible opportunity following the denial of certiorari by the Supreme Court. That opportunity was the Merwin decision.

Admittedly, if I had been given an opportunity to "write on a clean slate," I would not have chosen the present construction of sections 7(a) and 15(a) of the Act. In other words, if I were a legislator and not a regulator charged with the responsibility of implementing legislation, I would have preferred a statute that would give the original licensee the first option of a new license for an existing facility, provided that licensee satisfied strict public interest standards. Besides being less disruptive, that would have been the fairest approach and one most in the public interest, since the existing licensee has nothing to gain but its ratepayers have much to lose in a relicensing proceeding. However, I am a regulator. As such, I am required to follow the mandate of Congress. Accordingly, I voted to overrule Bountiful in order to effectuate the plain meaning of the Act, which affords neither a first option to the original licensee nor a preference to a municipality as against the original licensee in relicensing proceedings.

II. Pending Bills on the Issuance of New Licenses to Operate Existing Non-Federal Hydroelectric Facilities

A. H.R. 4402

This bill, the "Electric Consumers Protection Act of 1983," would amend section 7 of the Act by deleting reference to section 15, which covers relicensing. The effect of this amendment would be to eliminate municipal preference in all relicensing cases, whether or not the existing licensee is an applicant. As stated previously, in Merwin, the Commission held that the current statute provides for a municipal preference in relicensing proceedings except against the existing licensee.

Further, H.R. 4402 would amend section 15 pertaining to the procedures for considering relicense applications. The Commission would consider, within the context of the standards in section 10(a) of the Act, the existing licensee's plans for the next license term. If the Commission determined, taking into account the public benefits provided during the preceding license term, that these plans complied with section 10(a) standards, it would issue a new license to the existing licensee. If the Commission determined that the existing licensee's plans did not comport with section 10(a), it would be authorized to issue the new license to a competing applicant. In the event a competing applicant received the new license, it would be required to pay the existing licensee "just compensation" for taking possession of the project works. Just compensation would be determined by the Commission "in accordance with due process of law."

This legislation has much to recommend it. First, it reflects the current statutory provision, as interpreted by the Commission in Merwin, that municipal preference does not apply in relicensing proceedings against existing licensees. Second, it would eliminate municipal preference from all relicensing proceedings. This legislation is based on sound and reasonable policy considerations. There is simply no persuasive reason why the Congress should direct that every municipal applicant should be favored over every non-municipal applicant in every relicensing case. Viewed from another perspective, why should the ratepayers of municipal utilities always be favored over the ratepayers of regulated investor-owned utilities?

The public's interest in the comprehensive development of water resources for various beneficial uses would be adequately protected by the relicensing procedure set forth in H.R. 4402. Section 10(a) mandates an extensive and intensive inquiry into all factors relevant to the public interest in the development of the power potential of our Nation's water resources to ensure that the plan approved by the Commission is "best adapted" to serve that interest. This provision would be fully applicable to any existing licensee's relicensing plans. Moreover, the Commission would have authority to impose such terms and conditions as it found necessary to ensure that the "best adapted" standard of section 10(a) would be fulfilled in the new license term. Finally, proceedings on an existing licensee's relicensing plans would remain open to intervention by persons and organizations with a sufficient interest, including competing applicants, who would be free, as they are now, to raise issues relevant to the relicensing decision. These proceedings could therefore acquire that adversarial character which is often useful in sharply defining issues and fully developing facts.

The current statutory formula of net investment plus severance damages may not be adequate to compensate an existing licensee fairly (and thereby protect its ratepayers) for the loss of its project. Whether it is adequate depends primarily upon the definition of "severance damages" in section 14 of the Act. The Commission has not yet had occasion to define that term. H.R. 4402 would require the Commission to determine, in any relicensing case in which the new license is awarded to a new licensee, the amount constituting "just compensation" to the existing licensee. This provision would seem to give the Commission more certain authority to ensure that the existing licensee is fairly compensated, and its ratepayers not unjustly disadvantaged, in the event the new license is awarded to a new licensee.

B. H.R. 5299

H.R. 5299, the "Public Interest Hydroelectric Facility Relicensing Reform Act of 1984," would direct issuance of a new license for an existing project to the applicant whose plans are best adapted to serve the public interest. In making this public interest determination, the Commission would be directed to consider the following three factors:

a) the plans to develop the affected water resources to meet various purposes, including environmental and recreational purposes;

b) the economic impact of a relicensing decision on the ratepayers of the competing applicants; and

c) "the electricity consumption efficiency improvement programs" of the applicants.

This bill would create a preference on relicensing for municipalities, applicable against existing licensees, in the event the Commission finds that the competing applicants' plans are equally well adapted to serve the public interest. H.R. 5299 would also modify the current recapture payment provision of section 14 of the Act. Under this modification, a challenger to an existing licensee's relicensing application would have the option to agree to pay a greater amount upon recapture than that specified in the net investment-severance damages formula. This greater amount would then be taken into account by the Commission in determining the economic impact on the existing licensee's ratepayers of losing the hydroelectric project.

Addressing the municipal preference provision first, the public interest would not be advanced by imposing a preference for all municipal applicants over all non-municipal applicants in relicensing proceedings. Each case should be decided on its individual merits. The notion of a fixed statutory bias favoring a particular category of applicants in all cases is fundamentally antithetical to this principle of deciding each case on its own merits. Moreover, the particular content of the bias proposed by H.R. 5299 appears to be without justification. As the Commission held in Merwin, the public interest lies in ensuring that as many consumers as possible should receive the benefits of inexpensive hydroelectricity without regard to whether they are served by public agencies or regulated privately-owned utilities.

Of the three substantive factors which H.R. 5299 would explicitly require the Commission to take into account in relicensing proceedings, the first two are covered under the current statute. Thus, in Merwin, the Commission undertook a broad inquiry into the competing applicants' plans to utilize the hydroelectric project for various beneficial public purposes, including fish and wildlife conservation, flood control, power, and recreation. Additionally, the Commission held that the economic impact of the relicensing choice on the consumers of the competing applicants was relevant. Indeed, it was primarily because the evidentiary record in Merwin demonstrated that the overall economic costs to the existing licensee's ratepayers of losing the project would greatly exceed the overall economic benefits to the competing applicant's ratepayers of gaining the project, that the Commission concluded the public interest strongly favored issuance of the new license to the existing licensee.

The third substantive factor is the "electricity consumption efficiency improvement" record and plans of each applicant. This is to include a consideration of an electric utility applicant's "conservation measures" and "load management techniques." In addition, the Commission is to consider the performance of the utility in "assisting its ratepayers in acquiring" cost-effective electricity consumption efficiency improvements.

This third relicensing criterion would significantly and unwisely expand the Commission's jurisdiction under Part I of the Act. First, an electric utility's policies and practices in restraining load growth has no necessary relevance to the question of which relicensing plan for utilization of the affected hydroelectric resource will be best adapted to the public interest -- a question that must be answered under section 10(a). Section 10(a) is intended to achieve the most beneficial use, with respect to a variety of goals (conservation, recreation, commerce, power, etc.), of the affected waterway. Control of electricity demand, however, concerns a utility's overall retail sales policies and practices, which encompass its entire resource base -- hydroelectric, coal, nuclear, purchased power, etc.

Second, Commission inquiry into a utility's control of electric load growth would take the Commission not only beyond the scope of its Part I responsibilities, but also beyond the traditional scope of its responsibilities under Part II of the Act. Control and handling of load growth is relevant to the prudence of management decisionmaking and this is an area that is in turn relevant to regulation of rates. This regulation is apportioned between Federal and state governments, with the former having jurisdiction of interstate wholesale rates and the latter having jurisdiction of retail rates. By far the greatest number of electric transactions entail retail sales and are thus within the domain of state commissions. H.R. 5299, by putting the Commission into an area primarily and traditionally covered by retail rate regulations, would upset a long-standing Federal-state balance that has heretofore prevailed in this particular area of utility regulation.

Third, this bill raises a significant question of proportionality. Would it be wise and prudent to allow the filing of a relicensing application for any hydroelectric project, no matter how small, to provide the springboard for a fullscale inquiry into a utility's entire policies and operations with respect to control and handling of electric load growth? Should, for example, the relicensing of a 10 MW hydroelectric project be held hostage to such an inquiry?

Turning to this bill's modification of the takeover payment, the provision allowing a possible negotiated agreement of an amount greater than that which would be required under the current net investment-severance damages formula would not guarantee fair compensation to the existing licensee. Agreement may or may not ever be reached in any given case. Absent agreement, the current provisions of section 14 would still apply. As stated above, there is some doubt, due to the cryptic language of section 14, whether the current payment formula adequately protects the existing licensee. To the extent that H.R. 5299 allows rather than requires payment of an amount sufficient to ameliorate adverse economic consequences to the existing licensee's ratepayers, it does not go far enough toward ensuring justice in the event of a takeover.

C. H.R. 5416

H.R. 5416, the "Electric Utility Competition Act of 1984," would confer upon rural electric cooperatives the same preference now accorded to municipalities under the Act. Thus, such cooperatives would be favored over non-municipal and non-cooperative applicants for preliminary permits and original licenses. This bill would not, however, alter the language in sections 7 and 15 of the Act which determines whether a preference applies on relicensing against an existing licensee. The Commission has determined in the Merwin that municipal preference does not apply in such cases. Therefore, enactment of H.R. 5416 would appear to leave resolution of the relicensing preference issue to judicial review of the Commission's interpretation of the applicable statutory language in Merwin.

This bill would also add a new section 15A to the Act. Under this new provision, the Commission would be required to transmit to the Attorney General a copy of every relicensing application for advice as to whether "activities under the license would create or maintain a situation inconsistent with the antitrust laws." The Attorney General would be required to report his advice within 180 days, which would receive due consideration from the Commission. Further, the Commission would be directed to hold a hearing on this issue if such is recommended by the Attorney General or requested by any party. Any Commission finding on this issue must follow a "broad inquiry into both the past and proposed activities of the licensee applicant which shall include consideration of all anti-competitive activities of the applicant and the potential anti-competitive consequences of issuing the new license to the applicant."

To the extent it would authorize and require the Commission to consider the possible anti-competitive consequences of a particular relicensing decision, H.R. 5416 is unnecessary. In Merwin, the Commission stated that its obligation was "to weigh ... substantiated anticompetitive claims, together with all other relevant factors, in exercising its judgment in the public interest." [25 FERC at 61,202.]. In other words, anti-competitive consequences are among the factors the Commission now considers and weighs in making decisions under section 10(a). This consideration and weighing is done within the context of the particular facts of each individual case. Claims of anti-competitive impact or conduct may be raised in a variety of ways, such as by intervenors in relicensing proceedings, or indeed by any interested person at any time during the license term through the filing of a complaint under section 306 of the Act. With regard to the latter procedure, it should be noted that section 10(h) makes the following a condition of every hydroelectric license:

> That combinations, agreements, arrangments, or understandings, express or implied, to limit the output of electric energy, to restrain trade, or to fix, maintain, or increase prices for electrical energy or service are hereby prohibited.

In sum, the Commission already has authority to consider relevant anti-competitive impacts of relicensing decisions and, further, to ensure that the licensee acts consistently with antitrust policies during the license term.

H.R. 5416 is unnecessary from another perspective. The Commission now considers anti-competitive issues when the facts of the particular case indicate such an inquiry is necessary and relevant to the public interest under section 10(a). H.R. 5416, however, directs a full scale antitrust review each time a relicensing application is submitted by any applicant -- whether or not there is any basis for such a review. At the very least, therefore, the procedure of mandatory referral to the Attorney General would prolong the ultimate decision on every relicensing application filed -- including those applications for which an antitrust inquiry is obviously unnecessary.

Aside from being unnecessary, the antitrust review procedure of H.R. 5416 sweeps too broadly. As stated above, subsection (c) of the proposed new section 15A would require the Commission to hold an antitrust hearing on recommendation of the Attorney General or "on the motion of any party." In making its ultimate finding, the Commission, to reiterate, would be required to conduct a broad inquiry into past and "proposed" activities and to include consideration of "all alleged anti-competitive activities of the applicant." These provisions would subject every person or organization that submitted an application for a new license for an existing hydroelectric project to a mandatory, unlimited antitrust review of its entire operations -- past, present, and future. This review could therefore encompass matters wholly unrelated to the uses and operations of the hydroelectric project subject to relicensing. In other words, H.R. 5416 would seem to expand implicitly the scope of the Commission's jurisdiction under Part I of the Act.

There is also a serious question of proportionality with H.R. 5416. Should, for example, the Attorney General and the Commission be authorized to conduct an antitrust inquiry into the entire activities, past and present, of a major utility upon that utility's filing of a relicensing application for a 10 MW hydroelectric project? On its face, H.R. 5416 would require such an inquiry "on the motion of any party."

Finally, the proposed new section 15A is apparently modeled after a provision in the Atomic Energy Act, 42 U.S.C. § 2135. Many applicants for relicensing before the Commission may have undergone antitrust review under the Atomic Energy Act, and, to that extent, H.R. 5416 may be duplicative.

D. Conclusion

Of the three bills, H.R. 4402 is the most likely to further the public interest in the relicensing of non-Federal development of our Nation's hydroelectric resources. It reflects the Merwin holding that there is no preference for municipal applicants against existing licensees in relicensing proceedings. This is sound policy -- there is no reasonable basis for favoring customers of municipal agencies over customers of regulated investor-owned utilities. H.R. 4402 also maintains the present scope of a relicensing inquiry -- a scope which is broad enough to include every factor of relevance to the use of the affected water resource, but limited by that relevancy requirement. This relevancy limitation is important because it focuses the Commission on matters which are within its expertise, saves proceedings from interminable delays and confusion, and preserves the allocation of regulatory responsiblities inherent in our Federal system. Finally, by establishing a standard of "just compensation" for takeovers, this bill would ensure that relicensing decisions do not adversely affect innocent ratepayers.

H.R. 5416 and H.R. 5299 pose difficulties for me. Most significantly perhaps, both bills seem to reflect a belief that allocation of the benefits of hydroelectricity should be made, at least in significant part, to reward or punish applicants for activities and plans which have no necessary relevance to the utilization of the affected water resource. Implementation of this belief could lead the Commission into areas beyond its expertise, delay and confuse proceedings, and intrude into areas now regulated by other regulatory authorities.

To reiterate, Part I of the Act and, more specifically, section 10(a) quite properly focus a hydropower licensing decision on consideration of a comprehensive plan for the development of the affected waterway for various beneficial public uses. These uses include, among other things, commerce, recreation, flood control, fish and wildlife conservation and, as specifically defined in the Merwin decision, inexpensive power for electric consumers of all classifications without regard to whether they are served by public or private entities. These ends are worthwhile and significant; and I would have great difficulty with any legislation that could have the effect of subordinating them to unrelated purposes.

Enclosure 2

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

MAY 9 1984

Honorable Richard L. Ottinger
Chairman, Subcommittee on Energy
 Conservation and Power
Committee on Energy and Commerce
House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

In response to your invitation to appear before the Subcommittee on Energy Conservation and Power on May 17, 1984, I have asked Commissioner A. G. Sousa to testify on behalf of the Commission because of his expertise in hydroelectric licensing matters and his experience at the Commission while relicensing policy was being formulated. The views expressed by Commissioner Sousa in his testimony will be his and not necessarily those of the rest of the Commission.

Copies of Commissioner Sousa's testimony are enclosed along with responses to the questions you submitted. If I can be of any further assistance, please let me know.

Sincerely,

Raymond J. O'Connor

Raymond J. O'Connor
Chairman

Enclosures

cc: Commissioner Sousa

Question 1. Please identify all hydroelectric facilities under license issued by the Commission since enactment of the Federal Water Power Act of 1920. Please identify these facilities by—

- — Name;
- — Ownership by name (including whether owner is a "State or municipality" or other owner);
- — Rated capacity;
- — Average annual capacity factor;
- — Location (including State and name of river);
- — Date of expiration of current license;
- — Whether and, if so, when, the facility has been relicensed.

Answer 1. The attached table lists all hydroelectric projects under license by FERC. The table includes all requested factors except the average annual capacity factor, which is not available from data presently maintained by the Department of Energy.

HYDROELECTRIC PROJECTS UNDER LICENSE
AS OF MARCH 31, 1984

The column headings are defined as follows:

P.N. - FERC Project Number

PROJ NAME - Project Name

OWNER - Name of Licensee

LT - License Type (3 alphanumeric characters)
- a. The first letter is an "M", "N", or "Y"
  - M - Major License (over 1,500 kW)
  - N - Minor License (up to and including 1,500 kW)
  - Y - Minor Part
- b. The second letter is an "O" indicating the license is in effect
- c. The third letter is an "N" or "P"
  - N - Non-public licensee
  - P - Public licensee (state or municipality)

INST-kW 1/ Licensed and already installed capacity in kW

AUTH-kW 1/ Licensed and under construction capacity in kW

ST - State

STREAM - Name of stream where project is located

ISS-DT - Date of issuance of present license

EXP-DT - Expiration date of present license (If the expiration date has passed, the project is operating under an annual license.)

NOTE: An "R" in the left margin of the table and underlining of the project number indicate that the project has been relicensed.

1/ Multiple entries in the INST-kW or AUTH-kW columns for any project indicate that there are multiple developments in that project. The total authorized project licensed capacity is the sum of all entries in the INST-kW and AUTH-kW columns for that project.

* P.M. ***	PROJ NAME	OWNER	LT	INST-KW	AVTH-KW	ST	STREAM	ISS DT	EXP DT - -
* 5	KERR	MONTANA POWER CO THE	MON	168000		MT	FLATHEAD	05/23/1930	05/22/1980
* 13	GREEN ISLAND	NIAGARA MOHAWK POWER CORP	MON	6000		NY	HUDSON	02/07/1977	03/02/2011
* 18	TWIN FALLS	IDAHO POWER CO	MON	8438		ID	SNAKE	06/11/1934	06/10/1984
* 20	SODA	UTAH POWER & LIGHT CO	MON	14000		ID	BEAR	07/29/1980	07/04/2003
* 67	BIG CREEK NO 2A & 8	SOUTHERN CALIFORNIA EDISON CO	MON	80000		CA	SAN JOAQUIN	08/09/1978	02/28/2009
*				58500			SAN JOAQUIN		
*					200000		TUNNEL NO.7		
* 77	POTTER VALLEY	PACIFIC GAS AND ELEC CO	MOK	9040		CA	RUSSIAN E FK	10/04/1983	09/30/2033
* 82	MITCHELL	ALABAMA POWER CO	MON	72500	91500	AL	COOSA	11/26/1975	07/31/2007
* 96	KERCKHOFF	PACIFIC GAS AND ELEC CO	MON	34080		CA	SAN JOAQUIN	11/08/1979	11/30/2022
*					140000		SAN JOAQUIN		
* 108	CHIPPEWA RESVR	NORTHERN STATES POWER CO	MON	0		WI	CHIPPEWA	08/08/1921	08/07/1971
* 120	BIG CREEK NO 3&4	SOUTHERN CALIFORNIA EDISON CO	MON	141500		CA	SAN JOAQUIN	09/07/1977	02/28/2009
* 135	OAK GROVE	PORTLAND GENERAL ELEC CO	MON	51000		OR	CLACKAMAS	04/09/1980	08/31/2006
* 137	MOKELUMNE	PACIFIC GAS AND ELEC CO	MON	29700		CA	MOKELUMNE N FK	11/23/1925	11/23/1975
*				9350			MOKELUMNE N FK		
*				51000			MOKELUMNE N FK		
*				13600			MOKELUMNE N FK		
*				89100			MOKELUMNE N FK		
* 175	BALCH NO. 1&2	PACIFIC GAS AND ELEC CO	MON	133200		CA	KINGS N FK	04/18/1980	04/30/2026
* 176	BEAR VALLEY & LAKE WOHLFORD	ESCONDIDO MUTUAL WATER CO	MON	1500		CA	ESCONDIDO CR	06/25/1924	06/24/1974
*				520			ESCONDIDO CR		
*							ESCONDIDO CR		
* 178	KERN CANYON	PACIFIC GAS AND ELEC CO	MON	8400		CA	KERN	09/07/1979	04/30/2005
* 184	EL DORADO	PACIFIC GAS AND ELEC CO	MON	20000		CA	AMERICAN RIVER S FK	12/11/1980	02/23/2002
* 190	UINTA	MOON LAKE ELECTRIC ASSN	MON	1200		UT	UINTA	07/01/1930	06/30/1980
* 199	SANTEE-COOPER	SOUTH CAROLINA PUB SERV AUTH	MOP	1920		SC	SANTEE	05/09/1979	03/31/2006
*				132600			SANTEE&COOPER		
* 201	BLIND SLOUGH	PETERSBURG CITY OF	NOP	2000		AK	CRYSTAL CR	06/04/1980	11/12/2004
* 233	PIT	PACIFIC GAS AND ELEC CO	MON	140500		CA	PIT	02/26/1981	10/31/2003
*				90000			PIT		
*				74250			PIT		
* 271	CARPENTER & REMMEL	ARKANSAS PWR AND LT CO	MON	10000		AR	OUACHITA	07/02/1980	02/28/2003
*				56000			OUACHITA		
* 287	DAYTON	HYDRO-OP ONE ASSOCIATES	MON	3680		IL	FOX	08/17/1979	04/10/2004
* 289	OHIO FALLS	LOUISVILLE GAS AND EL CO	MON	80320		KY	OHIO	09/27/1981	11/10/2005
* 298	KAWEAH	SOUTHERN CALIFORNIA EDISON CO	YON	1800		CA	KAWEAH	08/07/1924	08/06/1974

*					2800			KAWEAH		
*					2250			KAWEAH		
*	308	WALLOWA FALLS	PACIFIC POWER & LIGHT CO	MON	1100		OR	WALLOWA E FK	03/29/1976	02/28/1986
*	309	PINEY	PENN ELEC CO	MON	28800		PA	CLARION	06/29/1979	10/12/2002
*	344	SAN GORGONIO NO 1 & NO 2	SOUTHERN CALIFORNIA EDISON CO	MON	1500		CA	SAN GORGONIO CR	05/18/1983	04/26/2003
*					750			SAN GORGONIO CR		
*	346	BLANCHARD	MINNESOTA POWER & LIGHT CO	MON	12000		MN	MISSISSIPPI	05/20/1980	08/24/2003
*	349	MARTIN DAM	ALABAMA POWER CO	MON	60000	154200	AL	TALLAPOOSA	05/11/1978	06/08/2013
*	362	TWIN CITY	FORD MOTOR CO	MON	17900		MN	MISSISSIPPI	07/02/1970	06/06/2003
*	372	LOWER TULE	SOUTHERN CALIFORNIA EDISON CO	MON	2000		CA	TULE	05/10/1978	06/14/2000
*	382	BOREL	SOUTHERN CALIFORNIA EDISON CO	MON	9200		CA	KERN	09/07/1979	02/28/2005
*	400	AMES & TACOMA	COLORADO-UTE ELE ASSN INC	MON	8330	14000	CO	ANIMAS	09/01/1981	06/30/2010
*					3600			SAN MIGUEL LAKE FK		
*	401	MOTTVILLE	MICHIGAN POWER CO	MON	1680		MI	ST JOSEPH	02/28/1978	09/18/2003
*	405	CONOWINGO	SUSQ POWER	MON	474480		MD	SUSQUEHANNA	08/14/1980	09/01/2014
*	420	KETCHIKAN LAKES	KETCHIKAN CITY OF	MOP	4200		AK	KETCHIKAN CR	04/10/1982	06/30/2000
*	432	WALTERS	CAROLINA POWER AND LIGHT CO	MON	108000		NC	PIGEON	06/23/1926	11/22/1976
*	459	OSAGE	UNION ELECTRIC CO	MON	176200		MO	OSAGE	04/09/1981	02/28/2006
*	460	CUSHMAN NO 1 & NO 2	TACOMA CITY OF	YOP	81000		WA	SKOKOMISH N FK	06/03/1924	06/02/1974
*					43200			SKOKOMISH N FK		
*	469	WINTON	MINNESOTA POWER & LIGHT CO	MON	4000		MN	KAWISHIWI	03/13/1981	10/31/2003
*	472	ONEIDA	UTAH POWER & LIGHT CO	MON	30000		ID	BEAR	05/01/1981	06/30/2000
*	477	BULL RUN	PORTLAND GENERAL ELEC CO	MON	21000		OR	BULL RUN	05/23/1980	11/16/2004
*	485	BARTLETTS FERRY	GEORGIA POWER CO	MON	100000	65000	GA	CHATTAHOOCHEE	04/13/1978	12/14/2014
*	487	WALLENPAUPACK	PENN POWER & LIGHT CO	MON	40000		PA	LACKAWAXEN	06/19/1980	09/30/2004
*	503	SWAN FALLS	IDAHO POWER CO	MON	10400	25000	ID	SNAKE	12/22/1982	06/30/2010
*	516	SALUDA	SOUTH CAROINA ELEC & GAS CO	MON	208750		SC	SALUDA	08/05/1927	08/04/1977
*	539	LOCK NO 7	KENTUCKY UTILITIES CO	MON	2040		KY	KENTUCKY	08/19/1926	08/18/1976
*	553	SKAGIT RIVER	SEATTLE DEPT OF LIGHTING	MOP	150000		WA	SKAGIT	10/28/1927	10/27/1977
*					122400			SKAGIT		
*					360000			SKAGIT		
*	588	GLINES CANYON	CROWN ZELLERBACH CORP	MON	12050		WA	ELWHA	06/04/1926	06/03/1976
*	596	OLMSTED	UTAH POWER & LIGHT CO	YON	10300		UT	PROVO RIVER	10/21/1925	10/20/1975
*	597	STAIRS	UTAH POWER & LIGHT CO	MON	1000		UT	BIG COTTONWOOD CREEK	03/21/1977	06/30/2000
*	606	KILARC & COW CREEK	PACIFIC GAS AND ELEC CO	MON	1440		CA	COW CREEK SOUTH	02/08/1980	03/27/2007
*					3000			COW CREEK OLD		
*	618	JORDAN	ALABAMA POWER CO	MON	100000		AL	COOSA	10/27/1980	07/31/2007
*	619	BUCKS CREEK	PACIFIC GAS AND ELEC CO	MON	33000		CA	BUCKS & GRIZZLY CR	12/19/1974	10/31/2004
*	620	CHIGNIK	ALASKA PACKERS ASSN INC	NON	50		AK	INDIAN CR	04/11/1979	10/04/2005

* 632	LOWER MONROE	MONROE CITY CORP	MOP	100		UT	MONROE CR	11/21/1978	02/ 4/2006
* 637	CHELAN	CHELAN COUNTY PUD NO 1	MOP	48000		WA	CHELAN	05/12/1981	03/[illegible]/2064
* 659	CRISP COUNTY	CRISP COUNTY POWER COMM	MOP	15200		GA	FLINT	08/14/1980	08/09/2008
* 662	PINEDALE	PINEDALE POWER AND LIGHT CO	MON	0		WY	PINE CR	08/27/1943	02/11/1992
* 663	RIO BLANCO	PUERTO RICO WTR RES AUTH	MON	5000		PR	NICACO	11/07/1928	11/06/1978
* 693	HIGHLANDS	HIGHLANDS TOWN OF	MOP	750		NC	CULLASAJA RIVER	07/29/1981	07/31/2016
* 696	AMERICAN FORK CREEK	UTAH POWER & LIGHT CO	MON	950		UT	AMERICAN FORK CR.	11/24/1975	10/31/2000
* 710	SHAWANO	WISCONSIN POWER AND LT CO	MON	640		WI	WOLF	07/20/1927	07/19/1977
* 719	TRINITY	TWO RIVERS INC	MON	240		WA	PHELPS CR	07/18/1979	10/31/2002
* 733	OURAY	COLORADO-UTE ELE ASSN INC	MON	432		CO	UNCOMPAHGRE	01/30/1980	04/12/2010
* 739	CLAYTOR	APPALACHIAN POWER CO	MON	75000		VA	NEW	08/20/1980	06/30/2011
* 746	AUGUSTA CITY	AUGUSTA CITY OF	YOP	0		GA	SAVANNAH	06/24/1929	06/23/1979
* 785	CALKINS BRIDGE	CONSUMERS POWER CO	MON	2550		MI	KALAMAZOO	09/10/1980	04/10/2010
* 803	DE SABLA-CENTERVILLE	PACIFIC GAS AND ELEC CO	MON	18450		CA	BUTTE CREEK	06/12/1980	10/11/2009
*				6400			BUTTE CREEK		
* 814	BEAVER	UTAH POWER & LIGHT CO	MON	600		UT	BEAVER	07/01/1945	08/31/1979
*				2400			BEAVER		
* 848	WELLS RURAL	WELLS RURAL ELECTRIC CO	YON	0		NV	TROUT CR	12/14/1928	12/13/1973
* 906	CUSHAW RES	VIRGINIA ELECTRIC & POWER CO	MON	7500		VA	JAMES	09/30/1980	06/16/2008
* 925	OTTUMWA	OTTUMWA CITY OF	MOP	3000		IA	DES MOINES	03/24/1982	04/30/2008
* 935	MERWIN	PACIFIC POWER & LIGHT CO	MON	136000		WA	LEWIS	10/06/1983	12/11/2009
* 943	ROCK ISLAND	CHELAN COUNTY PUD NO 1	MOP	622500		WA	COLUMBIA	05/13/1981	01/31/2020
* 946	HYRUM	HYRUM CITY CORP	MOP	400		UT	BLACKSMITH FORK	03/03/1981	04/30/2030
* 1005	BOULDER CANYON	PUBLIC SERVICE CO OF COLO	MON	20000		CO	BOULDER CR MIDDLE	04/28/1981	08/31/2009
* 1025	SAFE HARBOR	SAFE HARBOR WTR PWR CORP	MON	230000	187500	PA	SUSQUEHANNA	08/14/1980	04/22/2030
* 1051	SKAGWAY DEWEY	ALASKA POWER & TEL CO	MON	340		AK	DEWEY LAKES	04/30/1980	08/29/2007
* 1061	PHOENIX	PACIFIC GAS AND ELEC CO	YON	1800		CA	STANISLAUS S FK	12/26/1930	12/25/1980
* 1121	MILLSEAT CREEK & BATTLE CREEK	PACIFIC GAS AND ELEC CO	MON	12150		CA	BATTLE CR	08/13/197[illegible]	07/31/2026
*				7650			BATTLE CR S FK		
*				6750			BATTLE CR S FK		
*				9550			MILLSEAT CR		
* 1175	LONDON & MARMET	KANAWHA VALLEY POWER CO	MON	14400		WV	KANAWHA	09/26/1983	01/31/2014
*				14400			KANAWHA		
* 1212	LAKE HILL	EPHRAIM CITY OF	MOP	0		UT	MISC. MOUNTAIN SPRINGS	08/24/1933	08/23/1983
*				205			COTTONWOOD CR		
* 1218	FLINT RIVER RESERVOIR	GEORGIA POWER CO	MON	5400		GA	FLINT	12/27/1979	09/30/2001
* 1235	RADFORD	RADFORD CITY OF	MOP	800		VA	LITTLE CR	12/07/1933	12/06/1983
* 1250	AZUSA	PASADENA CITY OF	MUP	3000		CA	SAN GABRIEL	05/18/1934	05/30/1984
* 1256	COLUMBUS & MONROE	LOUP RIVER PUB PWR D	MOP	48500		NE	LOUP & CANAL FROM	12/29/1982	04/15/2014

			131					LOUP		
*					7200			LOUP & CANAL FROM LOUP		
*	1267	BUZZARD ROOST	DUKE POWER CO	MOH	15000		SC	SALUDA	02/11/1935	02/10/1985
*	1273	PAROWAN	PAROWAN CITY CORPORATION	MOP	600		UT	CENTER CR	07/15/1977	12/30/2004
*	1290	WINFIELD	KANAWHA VALLEY POWER CO	MOH	14760		WV	KANAWHA	09/26/1983	01/31/2014
*	1333	TULE RIVER	PACIFIC GAS AND ELEC CO	MOH	4800		CA	TULE N FK & M FK	05/01/1939	04/30/1989
*	1354	CRANE VALLEY	PACIFIC GAS AND ELEC CO	MOH	880		CA	WILLOW CR N FK	05/01/1939	04/30/1989
*					4000			WILLOW CR N FK		
*					2880			WILLOW CR N FK		
*					340			WILLOW CR N FK		
*					3220			WILLOW CR N FK		
*	1388	POOLE	SOUTHERN CALIFORNIA EDISON CO	MOH	10000		CA	LEEVINING CR	08/25/1939	11/30/1986
*	1389	RUSH CREEK	SOUTHERN CALIFORNIA EDISON CO	MOH	8400		CA	RUSH CR	05/01/1939	11/30/1986
*	1390	LUNDY	SOUTHERN CALIFORNIA EDISON CO	MOH	3600		CA	MILL CR	10/02/1939	11/30/1986
*	1394	BISHOP CREEK	SOUTHERN CALIFORNIA EDISON CO	MOH	0		CA	BISHOP CR	09/03/1940	11/30/1986
*					0			BISHOP CR		
*					0			BISHOP CR		
*					21875			BISHOP CR		
*	1403	HARROWS	PACIFIC GAS AND ELEC CO	MOH	9350		CA	YUBA	08/01/1941	07/31/1991
*	1413	PONDS LODGE	ISLAND PARK RESORTS INC	MON	200		ID	BUFFALO	03/14/1980	10/31/2004
*	1417	CENTRAL NEBRASKA	CENTRAL NEB PUB PWR & I D	MOP	18600		NE	CANAL FROM PLATTE	07/30/1937	07/29/1987
*					18000			CANAL FROM PLATTE		
*					18000			PLATTE&CANAL FROM PLATTE		
*						50000		NORTH PLATTE		
*	1432	DRY SPRUCE	C W C FISHERIES	MON	75		AK	DRY SPRUCE BAY	05/20/1971	10/26/1988
*	1473	FLINT CREEK	MONTANA POWER CO THE	MON	1100		MT	FLINT CR	07/01/1938	06/30/1988
*	1490	MORRIS SHEPPARD	BRAZOS RIVER AUTHORITY	MOP	22500		TX	BRAZOS	05/25/1938	05/24/1988
*	1494	PENSACOLA	GRAND RIVER DAM AUTHORITY	MOP	86400		OK	GRAND NEOSHO	07/26/1939	12/31/1988
*	1510	KAUKAUNA	KAUKAUNA CITY OF	MOP	4800		WI	FOX	11/30/1938	03/31/1989
*	1517	UPPER MONROE	MONROE CITY CORP	MOP	125		UT	MONROE CR	07/01/1940	06/30/1990
*	1553	FALLS CREEK	NEW JERSEY ZINC CO	MON	330		CO	FALL CR	07/13/1977	06/27/2000
*	1574	MOUNTAIN SPRINGS	MANTI CITY LIGHT & POWER	MOP	400		UT	MANTI CR	09/03/1940	09/02/1990
*	1651	SWIFT CREEK	LOWER VALLEY PWR AND LT CO	MON	0	750	WY	SWIFT CR	12/01/1942	11/30/1992
*					0	800		SWIFT CR		
*	1715	SPRING CREEK	SPRINGVILLE CITY OF	YOP	100		UT	SPRING CREEK	06/23/1941	06/22/1991
*	1744	WEBER	UTAH POWER & LIGHT CO	MON	3465		UT	WEBER	05/14/1948	06/30/1970
*	1746	LEIDY CREEK	CORD VIRGINIA KIRK	MON	200		NV	LEIDY CR	05/16/1966	09/30/1991
*	1759	MICHIGAMME	WISCONSIN ELECTRIC PWR CO	MON	6140		MI	MENOMINEE	11/05/1974	12/31/2001
*					15000			MICHIGAMME		
*					1800			MICHIGAMME		
*	1773	YELLOWSTONE	MOON LAKE ELECTRIC A	MON	900		UT	YELLOWSTONE CR	04/01/1943	03/31/1993

		SSH							
* 1835	SUTHERLAND	NEBRASKA PUB PWR DIST	MOP	26100		NE	CANAL FROM N & S PLATTE	04/13/1943	06/30/1987
R * 1855	BELLOWS FALLS	NEW ENGLAND POWER CO	MOH	40800		NH	CONNECTICUT	08/03/1979	04/30/2018
* 1858	BEAVER CITY	BEAVER CITY CORPORATION	MOP	625		UT	BEAVER	07/31/1943	07/30/1993
* 1862	NISQUALLY RIVER	TACOMA CITY OF	MOP	64000		WA	NISQUALLY	01/01/1944	12/31/1993
*				50000			NISQUALLY		
* 1864	VICTORIA	UPPER PENINSULA POWER CO	MOH	0		MI	ONTONAGON	10/05/1953	12/31/1988
*				12000			W. BRANCH ONTONAGON		
*							W. BRANCH ONTONAGON		
*							S. BRANCH ONTONAGON		
R * 1869	THOMPSON FALLS	MONTANA POWER CO THE	MOH	30000		MT	CLARK FK	12/28/1979	12/31/2015
R * 1881	HOLTWOOD	PENN POWER & LIGHT CO	MOH	107200		PA	SUSQUEHANNA	08/14/1980	09/01/2004
R * 1888	YORKHAVEN	METROPOLITAN EDISON CO	MOH	19600		PA	SUSQUEHANNA	08/14/1980	09/01/2014
R * 1889	TURNERS FALLS	WESTERN MASS ELECTRIC CO	MOH	51000		MA	CONNECTICUT RIVER	05/05/1980	04/30/2018
*				4840			CONNECTICUT CAN		
R * 1892	WILDER	NEW ENGLAND POWER CO	MOH	32400		NH	CONNECTICUT	12/10/1979	04/30/2018
R * 1893	MERRIMACK RIVER	PUBLIC SERVICE CO OF N H	MOH	16000		NH	MERRIMACK	05/08/1980	12/31/2005
*				1600			MERRIMACK RIVER		
*				5600	5900		MERRIMACK RIVER		
R * 1894	PARR SHOALS	SOUTH CAROLINA ELEC & GAS CO	MOH	14880		SC	BROAD	08/28/1974	06/30/2020
*				518400			BROAD		
R * 1895	COLUMBIA	SOUTH CAROLINA ELEC & GAS	MOH	10600		SC	BROAD	04/28/1980	06/30/2080
R * 1904	VERNON	NEW ENGLAND POWER CO	MOH	24400		NH	CONNECTICUT	06/25/1979	04/30/2018
* 1922	BEAVER FALLS CREEK	KETCHIKAN CITY OF	MOP	2100		AK	SILVIS LAKE	04/05/1945	04/30/1995
*				4400			SILVIS LAKE		
*				1200			SILVIS LAKE		
* 1927	NORTH UMPQUA	PACIFIC POWER & LIGHT CO	MOH	0		OR	NORTH UMPQUA	01/30/1949	01/29/1997
*				33000			NORTH UMPQUA		
*				15000			CLEARWATER		
*				26000			CLEARWATER		
*				42501			NORTH UMPQUA		
*				11000			NORTH UMPQUA		
*				18000			NORTH UMPQUA		
*				11250			NORTH UMPQUA		
* 1930	KERN RIVER NO 1	SOUTHERN CALIFORNIA EDISON CO	MOH	24992		CA	KERN	05/01/1946	04/30/1996
* 1932	LYTLE CREEK	SOUTHERN CALIFORNIA EDISON CO	MOH	400		CA	LYTLE CR	08/09/1946	04/30/1996
* 1933	SANTA ANA NO 1 & NO 2	SOUTHERN CALIFORNIA EDISON CO	MOH	800		CA	SANTA ANA	01/03/1947	04/30/1996
*				3200			SANTA ANA		
* 1934	MILL CREEK NO 2 & NO 3	SOUTHERN CALIFORNIA EDISON CO	MOH	1800		CA	MILL CR	08/09/1946	04/30/1996
*				288			MILL CR		
* 1940	TOMAHAWK	WISCONSIN PUB SERV CORP	MOH	2600		WI	WISCONSIN	09/19/1948	12/31/1986
* 1951	SINCLAIR	GEORGIA POWER CO	MOH	45000		GA	OCONEE	06/01/1948	08/31/1997

*	1952	EAGLE PASS	MAVERICK CO W C I D NO1	MOP	0		TX	RIO GRANDE	10/24/1958	06/30/1996
*	1953	DU BAY	CONSOLIDATED WATER PWR CO	MOM	7200		WI	WISCONSIN	02/04/1952	06/30/1991
R 4	1957	OTTER RAPIDS	WISCONSIN PUB SERV CORP	MOM	700		WI	WISCONSIN	08/08/1975	06/30/1990
*	1960	FLAMBEAU	DAIRYLAND POWER COOP	MOM	15000		WI	FLAMBEAU	03/14/1951	02/28/2001
*	1962	CRESTA & ROCK CREEK	PACIFIC GAS AND ELEC CO	MOM	113400		CA	FEATHER N FK	10/01/1947	09/30/198
*					67500			FEATHER N FK		
*	1966	GRANDFATHER FALLS	WISCONSIN PUB SERV CORP	MOM	17240		WI	WISCONSIN	02/26/1951	12/31/198
R *	1967	WHITING&PLOVER	KIMBERLY-CLARK CORP	MOM	600		WI	WISCONSIN	10/23/1974	06/30/199
*	1971	HELLS CANYON	IDAHO POWER CO	MOM	391500		OR	SNAKE	08/04/1955	07/31/200
*					190400			SNAKE		
*					585000			SNAKE		
*	1975	BLISS	IDAHO POWER CO	MOM	69000		ID	SNAKE	03/01/1948	02/28/199
*	1979	ALEXANDER	WISCONSIN PUB SERV CORP	MOM	4200		WI	WISCONSIN	01/05/1949	06/30/197
*	1980	BIG QUINNESEC FALLS	WISCONSIN ELECTRIC PWR CO	MOM	22700		MI	MENOMINEE	11/04/1949	02/28/199
*	1981	STILES	OCONTO ELECTRIC COOP	MOM	1000		WI	OCONTO	03/01/1950	02/28/200
*	1982	HOLCOMBE	NORTHERN STATES POWER CO	MOM	34000		WI	CHIPPEWA	05/19/1950	06/30/199
*	1984	PETENWELL-CASTLE ROCK	WISCONSIN RIVER POWER CO	MOM	15000		WI	WISCONSIN	12/15/1950	01/31/199
*					20000			WISCONSIN		
*	1986	ROCK CREEK	CALIF PACIFIC UTIL CO	MOM	800		OR	ROCK CR	06/30/1946	06/29/199
*	1988	KINGS RIVER	PACIFIC GAS AND ELEC CO	MOM	75000		CA	KINGS N FK	04/28/1955	03/31/198
*					150000			KINGS N FK		
*	1991	MOYIE NO 1 & 2	BONNERS FERRY CITY OF	MOP	3650		ID	MOYIE	04/05/1950	03/31/199
*	1992	FIRE MOUNTAIN LODGE	TOWNSEND DONALD C	MOM	15		CA	FERN SPRINGS	05/06/1980	04/30/201
*	1994	SNAKE CREEK	HEBER LIGHT AND PWR PLANT	MOP	750		UT	SNAKE CR	12/29/1949	06/30/199
R *	1999	WAUSAU	WISCONSIN PUB SERV CORP	MOM	5400		WI	WISCONSIN	04/02/1975	06/30/199
*	2000	ROBERT MOSES	POWER AUTHORITY OF THE STATE OF NY	MOP	912000		NY	ST LAWRENCE	07/15/1953	10/31/200
*	2004	CONNECTICUT CANAL	HOLYOKE WATER POWER CO	MOM	15000	15000	MA	CONNECTICUT	09/29/1949	08/31/199
*					7640			CONNECTICUT CAN		
*					500			CONNECTICUT CAN		
*					2900			CONNECTICUT CAN		
*					225			CONNECTICUT CAN		
*					1600			CONNECTICUT CANAL		
*	2005	DONNELLS & BEARDSLEY	OAKDALE & SOUTH SAN JOAQUIN I D S	MOP	54000		CA	STANISLAUS M FK	05/03/1950	12/31/2004
*					9990			STANISLAUS M FK		
*	2009	GASTON & ROANOKE RAPIDS	VIRGINIA ELECTRIC & POWER CO	MOM	100000		NC	ROANOKE	02/01/1951	01/31/2001
*					177920			ROANOKE		
*	2016	MAYFIELD & MOSSYROCK	TACOMA CITY OF	MOP	161500	40000	WA	COWLITZ	11/27/1951	12/31/2001
*					300000			COWLITZ		
– *	2017	BIG CREEK NO 4	SOUTHERN CALIFORNIA EDISON CO	MOM	84000		CA	SAN JOAQUIN	03/01/1949	02/28/1999
*	2019	MURPHYS	PACIFIC GAS AND ELEC CO	MOM	3600		CA	STANSLS N FK DIV	11/06/1946	11/05/1996

*	2030	ROUND BUTTE & PELTON	PORTLAND GENERAL ELEC CO	MON	247050		OR	DESCHUTES	01/01/1952	12/31/20
*					15000			DESCHUTES RIVER		
*					123000			DESCHUTES		
*	2031	BARTHOLOMEW SPRINGS	SPRINGVILLE CITY OF	YOP	500		UT	BARTHOLOMEW CR	10/01/1952	09/30/20
*	2032	STRAWBERRY CREEK	LOWER VALLEY PWR AND LT CO	MON	1500		WY	STRAWBERRY CR	05/11/1951	09/30/19
*	2035	GROSS DAM	DENVER CITY & COUNTY OF	MOP	0		CO	BOULDER CR SOUTH	05/01/1950	04/30/20
*	2042	BOX CANYON	PEND OREILLE PUD NO 1	MOP	60000		WA	PEND OREILLE	02/05/1952	01/31/20
*	2047	STEWARTS BRIDGE	NIAGARA MOHAWK POWER CORP	MON	30000		NY	SACANDAGA	07/03/1950	08/31/20
*	2055	C J STRIKE	IDAHO POWER CO	MON	82500		ID	SNAKE	02/06/1951	11/30/20
*	2056	ST ANTHONY FALLS	NORTHERN STATES POWER CO	MON	12400		MN	MISSISSIPPI	09/06/1951	12/31/20
*					8000			MISSISSIPPI		
*	2058	CABINET GORGE	WASHINGTON WATER PWR CO	MON	200000		ID	CLARK FORK	01/10/1951	01/09/26
*	2060	CARRY FALLS RES	NIAGARA MOHAWK POWER CORP	MON	0		NY	RAQUETTE	02/12/1951	01/31/20
*	2061	LOWER SALMON	IDAHO POWER CO	MON	60000		ID	SNAKE	10/23/1951	12/23/19
*	2062	ENLOE	OKANAGAN COUNTY P U D	MOP		3720	WA	SIMILKAMEEN RIVER	03/03/1983	02/28/20
*	2064	WINTER	NORTH CENTRAL POWER CO	MON	625		WI	CHIPPEWA E FK	11/19/1951	11/30/20
*	2067	TULLOCH	OAKDALE & SOUTH SAN JOAQUIN I D S	MOP	17100		CA	STANISLAUS	08/21/1951	12/31/20
*	2069	IRVING & CHILDS	LINCOLN NATL LIFE INS CO	MON	5400		AZ	FOSSIL CR	01/01/1945	12/31/19
*					1600			FOSSIL CR		
*	2071	YALE	PACIFIC POWER & LIGHT CO	MON	108000		WA	LEWIS	04/25/1951	04/30/20
*	2072	LOWER PAINT	WISCONSIN ELECTRIC PWR CO	MON	100		MI	PAINT	12/29/1951	12/31/20
*	2073	MICHIGAMME FALLS	WISCONSIN ELECTRIC PWR CO	MON	9600		MI	MICHIGAMME	10/05/1951	10/31/20
*	2074	HEMLOCK FALLS	WISCONSIN ELECTRIC PWR CO	MON	2800		MI	MICHIGAMME	10/16/1951	10/31/20
*	2075	NOXON RAPIDS	WASHINGTON WATER PWR CO	MON	396000		MT	CLARK FK	05/12/1955	04/30/20
*	2077	FIFTEEN MILES FALLS	NEW ENGLAND POWER CO	MON	10560		NH	CONNECTICUT	01/25/1952	07/31/20
*					140400			CONNECTICUT		
*					140400			CONNECTICUT		
*	2079	MIDDLE FORK AMERICAN RIVER	PLACER CO WATER AGENCY	MOP	110625		CA	RUBICON	03/01/1963	02/28/20
*					15300			AMERICAN M FK		
*					79200			AMERICAN M FK		
*					6570			AMERICAN M FK		
*	2082	KLAMATH	PACIFIC POWER & LIGHT CO	MON	3200		OR	LINK	01/28/1954	02/28/20
*					600			LINK		
*					0			KLAMATH		
*					80000			KLAMATH		
*					20000			KLAMATH		
*					27000			KLAMATH		
*					2200			FALL CR		
*					18000			KLAMATH		
*	2084	RAQUETTE	NIAGARA MOHAWK POWER CO	MON	22500		NY	RAQUETTE	02/05/1952	01/31/20

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*                                                              14400                    RAQUETTE
*                                                              22500                    RAQUETTE
*                                                              22500                    RAQUETTE
*                                                              19350                    RAQUETTE
* 2085   MAMMOTH POOL          SOUTHERN CALIFORNIA    MOH     129360            CA    SAN JOAQUIN          12/30/1957   11/30/2007
                               EDISON CO
*                                                                                       SAN JOAQUIN RIVER
* 2086   LAKE THOMAS A. EDISO  SOUTHERN CALIFORNIA    MOH          0            CA    MONO CR              09/29/1953   08/31/2003
         N                     EDISON CO
* 2088   SOUTH FORK            OROVILLE WYANDOTTE I   MOP      52200            CA    FEATHER S FK         07/17/1952   03/31/2009
                                D S
*                                                               9900                    FEATHER S FK
*                                                              28800                    FEATHER S FK
*                                                                      13200            S FK FEATHER
*
* 2090   WATERBURY NO 22       GREEN MOUNTAIN POWER   MOH       5520            VT    WATERBURY            07/20/1954   08/31/2001
                                CORP
* 2100   FEATHER RIVER         CALIFORNIA DEPT OF W   MOP     115100   13000    CA    FEATHER              02/11/1957   01/31/2007
                               ATER RESOURCES
*                                                             644250    5000            FEATHER
*                                                                                       FEATHER RIVER
*                                                                       3000            FEATHER RIVER
* 2101   UPPER AMERICAN RIVER  SACRAMENTO M U D       MOP     198400            CA    SILVER CREEK         08/01/1957   07/31/2007
*                                                                      10000            SOUTH FORK SILVER
                                                                                         CREEK
*                                                             142500                    SILVER CR
*                                                             133000                    SILVER CR
*                                                              33250                    SILVER CR
*                                                              23750                    AMERICAN S FK
*                                                              74100                    GERLE CR
* 2103   WANETA                COMINCO AMERICAN CO    YOH          0            WA    CEDAR CREEK          08/05/1952   07/31/2002
* 2105   UPPER NO. FORK FEATH  PACIFIC GAS AND ELEC   MOH               1300    CA    NORTH FORK FEATHE    11/01/1954   10/31/2004
         ER RIVER               CO                                                      R RIVER
*                                                              36000                    BUTT CREEK
*                                                             109800                    FEATHER N FK
*                                                              75000                    FEATHER N FK
*                                                             117900                    NORTH FORK FEATHE
                                                                                        R RIVER
* 2106   MCCLOUD-PIT           PACIFIC GAS AND ELEC   MOH     104400            CA    PIT                  08/18/1961   07/31/2011
                                CO
*                                                              79200                    PIT
*                                                             154800                    MCCLOUD & IRON CA
                                                                                        NYON CR
* 2107   POE                   PACIFIC GAS AND ELEC   MOH     142830            CA    FEATHER N FK         10/26/1953   09/30/2003
                                CO
R* 2110  STEVENS POINT         CONSOLIDATED WATER P   MOH       3840            WI    WISCONSIN            01/17/1977   06/30/2000
                               WR CO
_* 2111  SWIFT NO 1            PACIFIC POWER & LIGH   MOH     204000            WA    LEWIS                05/01/1956   04/30/2006
                               T CO
* 2113   WISCONSIN VALLEY      WIS VALLEY IMPROVEME   MOH          0            WI    WISCONSIN            05/28/1959   07/31/1993
                               NT CO
*                                                                  0                    NORTH PELICAN
*                                                                  0                    PELICAN
*                                                                  0                    TOMAHAWK
*                                                                  0                    SQUIRREL
*                                                                  0                    TOMAHAWK
-*                                                                 0                    TOMAHAWK
*                                                                  0                    SPIRIT
*                                                                  0                    ST GERMAIN
*                                                                  0                    BIG EAU PLEINE R
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					0			ST GERMAIN		
					0			WISCONSIN		
					0			LITTLE ST GERMAIN CR		
*					0			TWIN		
*					0			BUCKATAPHON CR		
*					0			DEERSKIN		
*					0			LITTLE DEERSKIN CR		
*					0			SEVEN MILE CR		
*					0			NINE MILE CR		
*					0			EAGLE		
*					0			SUGAR CAMP CR		
*	2114	PRIEST RAPIDS	GRANT COUNTY PUD NO 2	MOP	788500		WA	COLUMBIA	11/04/1955	10/31/2005
*					831250			COLUMBIA		
*	2130	STANISLAUS-SPRING GAP	PACIFIC GAS AND ELEC CO	MON	6000		CA	STANISLAUS S FK	01/01/1955	12/31/2004
*					81900			STANISLAUS M FK		
*	2131	KINGSFORD	WISCONSIN ELECTRIC PWR CO	MON	7200		MI	MENOMINEE	01/25/1979	06/30/2004
*	2142	INDIAN POND-HARRIS STATION	CENTRAL MAINE POWER CO	MON	76460		ME	KENNEBEC	05/21/1952	12/31/2001
*	2144	BOUNDARY	SEATTLE DEPT OF LIGHTING	MOP	551000	392000	WA	PEND OREILLE	07/10/1967	09/30/2011
*	2145	ROCKY REACH	CHELAN COUNTY PUD NO 1	MOP	1213150		WA	COLUMBIA	07/11/1957	06/30/2006
*	2146	COOSA RIVER	ALABAMA POWER CO	MON	87750		AL	COOSA	09/04/1957	07/31/2007
*					72900			COOSA		
*					128250			COOSA		
*					177000			COOSA		
*					225000			COOSA		
*	2149	WELLS	DOUGLAS COUNTY PUD NO 1	MOP	774250		WA	COLUMBIA	07/12/1962	05/31/2012
*	2150	BAKER	PUGET SOUND POWER & LIGHT CO	MON	94400		WA	BAKER	05/01/1956	04/30/2006
*					64000			BAKER		
*	2153	SANTA FELICIA RES	UNITED WTR CONSERVTN DIST	MOP	0		CA	PIRU SESPE	05/01/1954	04/30/2004
*	2155	CHILI BAR	PACIFIC GAS AND ELEC CO	MON	7020		CA	AMERICAN S FK	08/28/1962	07/31/2007
*	2157	UPPER SULTAN	SNOHOMISH CNTY PUD NO 1	MOP		111800	WA	SULTAN	06/01/1961	05/31/2011
*	2161	RHINELANDER	RHINELANDER PAPER CO	MON	2000		WI	WISCONSIN	01/23/1981	06/30/2000
*	2165	BANKHEAD, JOHN H.	ALABAMA POWER CO	MON	45125		AL	BLACK WARRIOR	09/12/1957	08/31/2007
*					157500			SIPSEY FK		
*	2169	LITTLE TENNESSEE	TAPOCO INC	MON	50000		TN	LITTLE TENNESSEE	03/17/1955	02/28/2005
*					121500			LITTLE TENNESSEE		
*					45000			CHEOAH		
*					110000			LITTLE TENNESSEE		
*	2170	COOPER LAKE	CHUGACH ELEC ASSN INC	MON	15000		AK	COOPER CR	05/01/1957	04/30/2007
*	2174	PORTAL	SOUTHERN CALIFORNIA EDISON CO	MON	10000		CA	BIG CREEK	04/19/1955	03/31/2005
*	2175	BIG CREEK NO 1 & 2	SOUTHERN CALIFORNIA EDISON CO	MON	57750		CA	BIG CREEK	03/29/1959	02/28/2009
*					66900			BIG CREEK		
*	2177	CHATTAHOOCHEE	GEORGIA POWER CO	MON	29600		GA	CHATTAHOOCHEE	03/05/1959	12/31/2004
*					60000			CHATTAHOOCHEE		
*					26000			CHATTAHOOCHEE		
*										

*	2179	MCSWAIN & NEW EXCHEQ UER	MERCED IRRIG DIST	MOP	0	CA	MERCED	04/18/1964	02/28/201
*					80000		MERCED		
R *	2180	GRANDMOTHER	OWENS-ILLINOIS INC	MOH	3000	WI	WISCONSIN	09/16/1977	06/30/200
*	2181	MENOMONIE	NORTHERN STATES POWE R CO	MOH	5400	WI	RED CEDAR	04/17/1956	03/31/200
*	2183	MARKHAM FERRY	GRAND RIVER DAM AUTH ORITY	MOP	100000	OK	GRAND	06/01/1955	05/31/200
*	2187	GEORGETOWN	PUBLIC SERVICE CO OF COLO	MOH	1440	CO	CLEAR CREEK S FK	08/27/1964	12/31/199
*	2188	MISSOURI-MADISON	MONTANA POWER CO THE	MOH	0	MT	MADISON	04/23/1956	11/30/199
*					9000		MADISON		
*					17000		MISSOURI		
*					38400		MISSOURI		
*					16800		MISSOURI		
*					35600		MISSOURI		
*					40000		MISSOURI		
*					48000		MISSOURI		
*					45000		MISSOURI		
R *	2192	BIRON NO. 2	CONSOLIDATED WATER P WR CO	MOH	3300	WI	WISCONSIN	08/14/1980	06/30/200
*	2194	BAR MILLS	CENTRAL MAINE POWER CO	MOH	4000	ME	SACO	05/11/1956	06/30/200
*	2195	NORTH FORK	PORTLAND GENERAL ELE C CO	MOH	19050	OR	CLACKAMAS	09/01/1956	08/31/200
*					34450		CLACKAMAS		
*					38400		CLACKAMAS		
*	2197	YADKIN FALLS	YADKIN INC	MOH	33000	NC	YADKIN	05/01/1958	04/30/200
*					42000		YADKIN		
*					96500		YADKIN		
*					29500		YADKIN		
*	2198	SANTA ANA NO 3	SOUTHERN CALIFORNIA EDISON CO	MOH	1500	CA	SANTA ANA	05/01/1959	04/30/200
*	2203	HOLT LOCK AND DAM	ALABAMA POWER CO	MOH	40000	AL	BLACK WARRIOR	10/07/1965	08/31/201
*	2204	WILLIAMS FORK	DENVER CITY & COUNTY OF	MOP	3000	CO	WILLIAMS FORK	01/31/1963	12/31/200
*	2205	LAMOILLE RIVER	CENTRAL VERMONT PUBL IC SERVICE CORP	MOH	5000	VT	LAMOILLE	05/07/1968	12/31/198
*					6000		LAMOILLE		
*					3000		LAMOILLE		
*					2800		LAMOILLE		
*	2206	BLEWETT FALLS LAKE & TILLERY	CAROLINA POWER AND L T CO	MOH	24600	NC	YADKIN	05/19/1958	04/30/200
*					84000		YADKIN		
R *	2207	MOSINEE	MOSINEE PAPER MILLS CO	MOH	3850	WI	WISCONSIN	01/05/1982	12/31/200
*	2210	LEESVILLE & SMITH MT LAKES	APPALACHIAN POWER CO	MOH	47500	VA	ROANOKE	04/25/1960	03/31/2010
— *					640000		ROANOKE		
*	2211	MARKLAND	PUBLIC SERVICE CO OF IND	MOH	81000	IN	OHIO	05/31/1961	04/30/2011
*	2212	ROTHSCHILD	WEYERHAEUSER CO	MOH	3640	WI	WISCONSIN	04/28/1959	07/31/1993
*	2213	SWIFT NO 2	COWLITZ COUNTY PUD N O 1	MOP	70000	WA	LEWIS	11/29/1956	04/30/2006
*	2216	NIAGARA-LEWISTON	POWER AUTHORITY OF T HE STATE OF NY	MOP	1950000	NY	NIAGARA	01/29/1958	08/31/2007
— *					240000		NIAGARA		
*	2219	BOULDER CREEK	GARKANE POWER ASSN I NC	MOH	4200	UT	BOULDER CR	05/27/1957	04/30/2007
R *	2221	OZARK BEACH	EMPIRE DISTRICT ELEC	MOH	16000	MO	WHITE	08/24/1979	08/31/1993

*	2225	SULLIVAN LAKE	PEND OREILLE PUD NO 1 CO	MOP	0		WA	SULLIVAN CREEK	11/25/1958	09/30/2008
*	2230	BLUE LAKE	SITKA CITY & BOROUGH OF	MOP	6000		AK	MEDVEICHA	04/01/1958	03/31/2008
*	2232	CATAWBA	DUKE POWER CO	MOM	20000		SC	CATAWBA	09/01/1958	08/31/2008
*					25500			CATAWBA		
*					36000			CATAWBA		
*					18720					
*					350000			CATAWBA		
*					68000			CATAWBA		
*					60000			CATAWBA		
*					36720			CATAWBA		
*					69000			CATAWBA		
*					73000			CATAWBA		
*					56000			WATEREE		
*	2233	WILLAMETTE	CROWN ZELLERBACH CORP	MOM	15660		OR	WILLAMETTE	06/21/1960	12/31/2004
*					15400			WILLAMETTE		
*					10300			WILLAMETTE		
*	2237	MORGAN FALLS	GEORGIA POWER CO	MOM	16800		GA	CHATTAHOOCHEE	03/27/1959	02/28/2009
*	2239	KINGS DAM	TOMAHAWK POWER & PULP CO	MOM	290		WI	WISCONSIN	07/01/1959	07/31/1993
*	2242	TRAIL BRIDGE & CARMEN	EUGENE CITY OF	MOP	80000		OR	MCKENZIE	12/01/1958	11/30/2008
*					10000			MCKENZIE SMITH		
*	2244	PACKWOOD LAKE	WASHINGTON PUB PWR SU SYS	MOP	26125		WA	LAKE CR	03/01/1960	02/28/2010
*	2245	CANNELTON	VANCEBURG CITY OF	MOP		·70560	KY	OHIO	03/29/1976	02/28/2026
*	2246	YUBA RIVER	YUBA COUNTY WATER AGENCY	MOP	46700		CA	YUBA	05/01/1966	04/30/2013
*					284400			YUBA N FORK		
*	2251	SAN JUAN	NEW ENGLAND FISH CO	MOM	100		AK	SAN JUAN LAKE	10/08/1957	10/07/1977
*	2255	CENTRALIA	NEKOOSA PAPERS INC	MOM	3200		WI	WISCONSIN	09/01/1959	07/31/1993
*	2256	WISCONSIN RAPIDS	CONSOLIDATED WATER PWR CO	MOM	4680		WI	WISCONSIN	10/05/1959	07/31/1993
*	2266	YUBA-BEAR	NEVADA IRRIGATION DISTRICT	MOP	37350		CA	BEAR R	05/01/1963	04/30/2013
*					22800			BEAR R		
*						3000		CANYON CREEK		
*					11000			BEAR R		
*						3500		MIDDLE YUBA		
*	2267	PULP MILL	ALASKA LUMBER PULP CO INC	MOM	0	900	AK	MEDVEICHA	06/21/1960	03/31/2010
*	2275	SALIDA HYDRO NO 1 & NO 2	PUBLIC SERVICE CO OF COLO	MOM	560		CO	ARKANSAS, S. FORK	03/05/1965	12/31/1993
*					750			ARKANSAS, S. FORK		
*	2277	TAUM SAUK	UNION ELECTRIC CO	MOM	350000		MO	BLACK E FK	08/26/1965	06/30/2010
*	2280	KINZUA P S	PENN ELEC CO-CLEV EL ILLM	MOM	355000		PA	ALLEGHENY	12/28/1965	11/30/2015
*	2283	DEER RIPS-ANDROSCOGGIN-GULF ISLAND	CENTRAL MAINE POWER CO	MOM	19200		ME	ANDROSCOGGIN	07/05/1962	12/31/1993
*					3600			ANDROSCOGGIN		
*					6540			ANDROSCOGGIN		
*	2284	TOPSHAM (BRUNSWICK)	CENTRAL MAINE POWER CO	MOM	19000		ME	ANDROSCOGGIN	02/02/1979	02/28/2029
*	2287	J BRODIE SMITH	PUBLIC SERVICE CO OF N H	MOM	15000		NH	ANDROSCOGGIN	04/25/1962	12/31/1993
*	2288	GORHAM	PUBLIC SERVICE CO OF N H	MOM	2150		NH	ANDROSCOGGIN	04/25/1967	12/31/1993

*	2290	KERN RIVER NO 3	SOUTHERN CALIFORNIA EDISON CO	MON	32000		CA	KERN	09/20/1953	12/31/1993
*	2291	PORT EDWARDS	NEKOOSA PAPERS INC	MON	3593		WI	WISCONSIN	07/19/1967	07/31/1993
*	2292	NEKOOSA	NEKOOSA PAPERS INC	MON	3800		WI	WISCONSIN	07/30/1962	07/31/1993
*	2299	NEW DON PEDRO	TURLOCK MODESTO IRRI G DIS	MOP	130400		CA	TUOLUMNE	03/10/1964	04/30/2016
*	2300	SHELBURNE	JAMES RIVER-NEW HAMP SHIRE ELEC INC	MON	3720		NH	ANDROSCOGGIN	07/19/1962	12/31/1993
R *	2301	MYSTIC LAKE	MONTANA POWER CO THE	MON	10000		MT	WEST ROSEBUD CR	10/05/1976	12/31/2009
*	2302	LEWISTON FALLS	UNION WATER POWER CO THE	MON	30	25000	ME	ANDROSCOGGIN	12/02/1963	12/31/1993
*	2304	BLUE RIDGE	PHELPS DODGE CORP	MON	2800		AZ	EAST CLEAR CR	03/20/1963	12/31/2012
*	2305	TOLEDO BEND	SABINE RIVER AUTH LA & TEX	MOP	85000		TX	SABINE	10/14/1963	09/30/2013
*	2306	CLYDE	CITIZENS UTILITIES C O	MON	0		VT	CLYDE	11/30/1962	12/31/1993
*					0			CLYDE		
*					0			CLYDE		
*					3600			CLYDE		
*					1600			CLYDE		
*	2307	SALMON CREEK & ANNEX CREEK	ALASKA ELEC LIGHT&PO W CO	MON	5600	6700	AK	SALMON CR UPPER	10/24/1963	08/31/1988
*					3520			ANNEX CR		
*	2309	YARDS CREEK	JERSEY CENTRAL PWR A ND LT	MON	338625		NJ	DELAWARE	03/14/1963	02/28/2013
*	2310	DRUM-SPAULDING	PACIFIC GAS AND ELEC CO	MON			CA	WISE CANAL	05/01/1963	04/30/2013
*								BEAR RIVER CANAL		
*								LAKE VALLEY CANAL		
*						10800		SOUTH CANAL		
*					2000			LITTLE BEAR		
*					5500			YUBA S & DEER CR		
*					12000			AMERICAN N F		
*					12000			AMERICAN N F		
*					22000			BEAR		
*					93300			YUBA S,BEAR,AMERI CAN N F		
*					10750			YUBA S		
*					6300			YUBA S		
*	2311	GORHAM	JAMES RIVER-NEW HAMP SHIRE ELEC INC	MON	4800		NH	ANDROSCOGGIN	12/04/1979	12/31/1993
*	2312	GREAT WORKS	DIAMOND INTER CORP	MON	4580	3150	ME	PENOBSCOT	12/09/1963	03/31/2002
*	2315	NEAL SHOALS	SOUTH CAROLINA ELEC & GAS CO	MON	5200		SC	BROAD	11/21/1963	12/31/1993
*	2318	E J WEST	NIAGARA MOHAWK POWER CORP	MON	20000		NY	SACANDAGA	06/25/1963	12/31/1993
*	2320	RAQUETTE	NIAGARA MOHAWK POWER CORP	MON	4800		NY	RAQUETTE	06/12/1964	12/31/1993
*					7200			RAQUETTE		
*					29520			RAQUETTE		
*					4480			RAQUETTE		
R *	2322	SHAWMUT	CENTRAL MAINE POWER CO	MON	4650	4090	ME	KENNEBEC	01/05/1981	01/31/2021
*	2323	DEERFIELD RIVER	NEW ENGLAND POWER CO	MON	0		MA	DEERFIELD E BR	10/29/1963	12/31/1993
*					4000			DEERFIELD		
*					33600			DEERFIELD		
*					7200			DEERFIELD		
*					4800			DEERFIELD		
*					4800			DEERFIELD		
*					4800			DEERFIELD		

*					15000		DEERFIELD		
*	2325	WESTON	CENTRAL MAINE POWER CO	MON	12000	ME	KENNEBEC	10/15/1964	12/3'/1993
*	2326	CROSS	JAMES RIVER-NEW HAMPSHIRE ELEC INC	MON	3220	NH	ANDROSCOGGIN	07/06/1964	12/31/1993
*	2327	CASCADE	JAMES RIVER-NEW HAMPSHIRE ELEC INC	MON	7200	NH	ANDROSCOGGIN	07/07/1964	12/31/1993
*	2329	WYMAN	CENTRAL MAINE POWER CO	MON	72000	ME	KENNEBEC	10/15/1964	12/31/1993
*	2330	RAYMONDVILLE-NORFOLK-NORWOOD	NIAGARA MOHAWK POWER CORP	MON	2000	NY	RAQUETTE	07/16/1964	12/31/1993
*					3000		RAQUETTE		
*					4500		RAQUETTE		
*					2000		RAQUETTE		
*	2331	NINETY NINE ISLANDS	DUKE POWER CO	MON	18000	SC	BROAD	07/15/1964	12/31/1993
*	2332	GASTON SHOALS	DUKE POWER CO	MON	9140	SC	BROAD	07/24/1964	12/31/1993
*	2333	RUMFORD FALLS	RUMFORD FALLS POWER CO	MON	12800	ME	ANDROSCOGGIN	05/14/1965	12/31/1993
*					21970		ANDROSCOGGIN		
*	2334	GARDNER FALLS	WESTERN MASS ELECTRIC CO	MON	3580	MA	DEERFIELD	07/15/1964	12/31/1993
*	2335	WILLIAMS	CENTRAL MAINE POWER CO	MON	13000	ME	KENNEBEC	07/24/1964	12/31/1987
*	2336	LLOYD SHOALS	GEORGIA POWER CO	MON	14400	GA	OCMULGEE	01/05/1968	12/31/1993
*	2337	PROSPECT NO 3	PACIFIC POWER & LIGHT CO	MON	7200	OR	ROGUE S FK	07/08/1964	12/31/1988
*	2341	LANGDALE	GEORGIA POWER CO	NON	1040	GA	CHATTAHOOCHEE	10/15/1964	12/31/1993
*	2342	CONDIT	PACIFIC POWER & LIGHT CO	MON	9600	WA	WHITE SALMON	12/20/1968	12/31/1993
*	2343	MILLVILLE	POTOMAC EDISON CO	MON	2840	WV	SHENANDOAH	08/11/1964	12/31/1987
*	2347	JANESVILLE	WISCONSIN POWER AND LI CO	NON	500	WI	ROCK	10/07/1964	12/31/1993
*	2348	BELOIT	WISCONSIN POWER AND LI CO	NON	380	WI	ROCK	10/07/1964	12/31/1993
*	2350	RIVERVIEW	GEORGIA POWER CO	NON	480	GA	CHATTAHOOCHEE	03/02/1965	12/31/1993
*	2351	CABIN CREEK	PUBLIC SERVICE CO OF COLO	MON	300000	CO	CLEAR CREEK SO	03/23/1964	02/28/2014
*	2352	MENASHA	WHITING GEORGE A PAPER CO	NON	250	WI	FOX	03/02/1965	10/31/1988
*	2354	TUGALO & TALLULAH	GEORGIA POWER CO	MON	6120	GA	TALLULAH	05/07/1964	12/31/1993
*					4800		TALLULAH		
*					16000		TALLULAH		
*					72000		TALLULAH		
*					45000		TUGALO		
*					22500		TUGALO		
*	2355	MUDDY RUN P S	PHILA ELECT PWR CO ETAL	MON	800000	PA	SUSQUEHANNA	11/09/1964	08/31/2014
*	2357	WHITE RAPIDS	WISCONSIN ELECTRIC PWR CO	MON	8000	MI	MENOMINEE	03/10/1965	12/31/1993
*	2360	ST LOUIS	MINNESOTA POWER & LIGHT CO	MON	0	MN	SKUNK & WHITEFACE	12/31/1964	12/31/1993
*					0		OTTER		
*					0		CLOQUET		
*					0		BEAVER		
*					0		BEAVER		
*					0		ST LOUIS		
*					0		ST LOUIS		
*					0		ST LOUIS		
*					83350		ST LOUIS		
*	2361	PRAIRE RIVER	MINNESOTA POWER & LI	NON	1084	MN	PRAIRIE	03/02/1965	12/31/1993

			GNT CO							
*	2362	GRAND RAPIDS	BLANDIN PAPER COMPANY	NON	2100		MN	MISSISSIPPI	11/12/1965	12/31/1993
*	2363	CLOQUET	POTLATCH CORPORATION	NON	6514		MN	ST LOUIS	12/11/1964	12/31/1993
*	2364	ABENAKI	MADISON PAPER INDUSTRIES	NON	3650		ME	KENNEBEC	08/03/1964	04/30/2004
*	2365	ANSON	MADISON PAPER INDUSTRIES	NON	6000		ME	KENNEBEC	08/11/1964	12/31/1993
*	2366	MILLINOCKET LAKE	MAINE PUBLIC SERVICE CO	NON	0		ME	MILLINOCKET	01/04/1965	06/30/1992
*	2367	CARIBOU	MAINE PUBLIC SERVICE CO	NON	800		ME	AROOSTOOK	01/04/1965	12/31/1993
*	2368	SQUA PAN	MAINE PUBLIC SERVICE CO	NON	1500		ME	SQUA PAN STREAM	01/04/1965	12/31/1990
*	2370	DEEP CREEK	PENN ELEC CO	NON	19200		MD	DEEP CREEK	07/13/1968	12/31/1993
*	2372	WARRIOR RIDGE	PENN ELEC CO	NON			PA	JUNIATA	06/03/1968	12/31/1993
*	2373	ROCKTON	SOUTH BELOIT W G & E CO	NON	1200		IL	ROCK	10/07/1964	12/31/1993
*	2374	WATERVLIET	WATERVLIET PAPER CO	NON	300		MI	PAW PAW	03/03/1965	12/31/1990
*	2375	ANDROSCOGGIN	INTERNATIONAL PAPER CO	NON	0	7800	ME	ANDROSCOGGIN	02/18/1965	09/30/1999
*					2500	625		ANDROSCOGGIN		
*					800	10000		ANDROSCOGGIN		
*					6300	12500		ANDROSCOGGIN		
*	2376	REUSENS	APPALACHIAN POWER CO	NON	12500		VA	JAMES	08/12/1964	12/31/1993
*	2381	ASHTON & ST ANTHONY	UTAH POWER & LIGHT CO	NON	5800		ID	HENRYS FORK OF SNAKE RI	12/19/1977	12/31/1987
*					500			HENRYS FORK OF SNAKE RI		
*	2385	GLEN FALLS	FINCH PRUYN AND CO	NON	9840		NY	HUDSON	02/25/1965	12/31/1993
*	2386	HOLYOKE NO 1	HOLYOKE GAS AND EL DEPT	NON	1056		MA	CONNECTICUT CAN	03/23/1965	02/28/1991
*	2387	HOLYOKE NO 2	HOLYOKE GAS AND EL DEPT	NON	800		MA	CONNECTICUT CAN	03/23/1965	03/31/1988
*	2388	HOLYOKE NO 3	HOLYOKE GAS AND EL DEPT	NON	450		MA	CONNECTICUT CAN	03/23/1965	05/31/1990
*	2389	EDWARDS	AUGUSTA DEV CORP	NON	3500		ME	KENNEBEC	08/12/1964	12/31/1993
*	2390	BIG FALLS	LAKE SUPERIOR DIST PWR CO	NON	7780		WI	FLAMBEAU	05/25/1965	12/31/1993
*	2391	WARREN	POTOMAC EDISON CO	NON	750		VA	SHENANDOAH	03/02/1965	12/31/1993
*	2392	GILMAN	GEORGIA PACIFIC CORP	NON	3390		VT	CONNECTICUT	05/13/1965	12/31/1990
*	2394	CHALK HILL	WISCONSIN ELECTRIC PWR CO	NON	7800		MI	MENOMINEE	11/15/1965	06/30/1993
*	2395	PIXLEY	FLAMBEAU PAPER CORP	NON	960		WI	N FK FLAMBEAU	11/16/1969	12/31/1993
*	2396	PIERCE MILLS	CENTRAL VERMONT PUBLIC SERVICE CORP	NON	250		VT	PASSUMPSIC	06/11/1969	12/31/1993
*	2397	GAGE	CENTRAL VERMONT PUBLIC SERVICE CORP	NON	700		VT	PASSUMPSIC	06/11/1969	12/31/1993
*	2399	ARNOLD FALLS	CENTRAL VERMONT PUBLIC SERVICE CORP	NON	350		VT	PASSUMPSIC	06/11/1969	12/31/1993
*	2400	PASSUMPSIC	CENTRAL VERMONT PUBLIC SERVICE CORP	NON	700		VT	PASSUMPSIC	02/11/1970	12/31/1993
*	2401	GRACE & COVE	UTAH POWER & LIGHT CO	NON	33000		ID	BEAR	10/06/1976	10/01/2001
*					7500			BEAR		
*	2402	PRICKETT	UPPER PENINSULA POWER CO	NON	1960		MI	STURGEON	01/25/1963	12/31/1993
*	2403	VEAZIE	BANGOR HYDRO-ELECTRIC CO	NON	8400		ME	PENOBSCOT	02/18/1965	12/31/1987
*	2404	THUNDER BAY RIVER	ALPENA POWER CO	NON	1050		MI	THUNDER BAY	02/13/1968	12/31/1993

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*                                                                 1800                THUNDER BAY
*                                                                    0                UPPER THUNDER BAY
                                                                                       R
*                                                                    0                THUNDER BAY LOWER
                                                                                       SO BR
*                                                                -4000                THUNDER BAY
* 2406    SALUDA              DUKE POWER CO         MDM           2400          SC    SALUDA               09/13/1968   12/31/1993
* 2407    YATES               ALABAMA POWER CO      MDM          32000          AL    TALLAPOOSA           01/14/1965   12/31/1993
* 2408    THURLOW DAM         ALABAMA POWER CO ET   MDM          58000          AL    TALLAPOOSA           04/05/1965   12/31/1993
                              AL
* 2409    NORTH FORK STANISLAU CALAVERAS COUNTY WTR MDP                    5200  CA                         02/08/1982   01/31/2032
          S                    DIST
*                                                                        200000       STANISLAUS N FK
* 2411    SCHOOLFIELD         DAN RIVER INC         MDM           4550          VA    DAN                  11/16/1976   12/31/1993
* 2413    WALLACE             GEORGIA POWER CO      MDM         324000          GA    OCONEE               06/01/1978   05/31/2020
* 2416    WARE SHOALS         RIEGEL TEXTILE CORP   MDM           3000     3200 SC    SALUDA               10/06/1976   09/30/2001
* 2417    HAYWARD             LAKE SUPERIOR DIST P  MDM            168          WI    NAMEKAGON            08/17/1967   12/31/1993
                              WR CO
* 2419    HILLMAN             ALPENA POWER CO       MDM            250          MI    THUNDER BAY          03/04/1965   12/31/1993
* 2420    CUTLER              UTAH POWER & LIGHT C  MDM          30000          UT    BEAR                 12/23/1968   12/31/1993
                              O
* 2421    LOWER HYDRO ELECT   FLAMBEAU PAPER CORP   MDM           1200          WI    FLAMBEAU N FK        04/19/1966   12/31/1993
* 2422    SAWMILL             JAMES RIVER-NEW HAMP  MDM           3174          NH    ANDROSCOGGIN         07/30/1965   12/31/1993
                              SHIRE ELEC INC
* 2423    RIVERSIDE           JAMES RIVER-NEW HAMP  MDM           7600          NH    ANDROSCOGGIN         08/20/1965   12/31/1993
                              SHIRE ELEC INC
* 2424    HYDRAULIC RACE      NIAGARA MOHAWK POWER  MDM           4687          NY    BARGE CANAL          12/09/1964   06/30/1991
                               CORP
* 2425    LURAY & NEWPORT     POTOMAC EDISON CO     MDM           1600          VA    SHENANDOAH S FK      07/21/1965   12/31/1993
*                                                                 1400                SHENANDOAH S FK
* 2426    CALIFORNIA AQUEDUCT CALIFORNIA DEPT OF W  MDP              0          CA    CALIFORNIA AQUEDU    03/22/1978   01/31/2022
                              ATER RESOURCES                                          CT
*                                                                          7200       MOJAVE SIPHON
*                                                                75000                CALIFORNIA AQUEDU
                                                                                      CT
*                                                                    0    15000       CALIFORNIA AQUEDU
                                                                                      CT
*                                                               119700                CALIFORNIA AQUEDU
                                                                                      CT
*                                                              1250000                CALIFORNIA AQUEDU
                                                                                      CT
* 2428    PIEDMON,            AQUENERGY SYSTEMS IN  MDM           1000          SC    SALUDA               09/23/1970   12/31/1987
                              C
* 2431    BRULE               WISCONSIN ELECTRIC P  MDM           5335          MI    BRULE                07/26/1967   12/31/1993
                              WR CO
* 2433    GRAND RAPIDS        WISCONSIN PUB SERV C  MDM           7020          MI    MENOMINEE            08/20/1965   12/31/1993
                              ORP
* 2436    FOOTE               CONSUMERS POWER CO    MDM           9000          MI    AU SABLE             01/04/1966   12/31/1993
* 2438    WATERLOO & SENECA FA NEW YORK ST EL AND G MDM           8000          NY    SENECA               03/05/1965   12/31/1993
          LLS                  CORP
*                                                                 1920                SENECA CANAL
* 2440    CHIPPEWA FALLS      NORTHERN STATES POWE  MDM          21600          WI    CHIPPEWA             04/07/1965   12/31/1993
                              R CO
* 2441    SECOND STREET       NORWICH CITY OF       MDP            800          CT    SHETUCKET            04/15/1965   12/31/1993
* 2442    WATERTOWN           WATERTOWN MUN ELEC D  MDP           5400          NY    BLACK                09/20/1967   12/31/1993
                              EPT
* 2444    WHITE RIVER         LAKE SUPERIOR DIST P  MDM           1000          WI    WHITE                05/03/1966   12/31/1993
                              WR CO
* 2445    CENTER RUTLAND      VERMONT MARBLE CO     MDM            275          VT    OTTER CR             08/19/1965   12/31/1993
* 2446    DIXON               COMMONWEALTH EDISON   MDM           3200          IL    ROCK                 04/17/1975   12/31/1993
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		CO							
* 2447	ALCONA	CONSUMERS POWER CO	MON	8000		MI	AU SABLE	05/11/1968	12/31/1993
* 2448	MIO	CONSUMERS POWER CO	MON	5000		MI	AU SABLE	05/14/1968	12/31/1993
* 2449	LOUD	CONSUMERS POWER CO	MON	4000		MI	AU SABLE	05/07/1965	12/31/1993
* 2450	COOKE	CONSUMERS POWER CO	MON	9000		MI	AU SABLE	05/14/1968	12/31/1993
* 2451	ROGERS	CONSUMERS POWER CO	MON	6000		MI	MUSKEGON	05/24/1968	12/31/1993
* 2452	HARDY	CONSUMERS POWER CO	MON	30000		MI	MUSKEGON	05/24/1968	12/31/1993
* 2453	FIVE CHANNELS	CONSUMERS POWER CO	MON	6000		MI	AU SABLE	01/09/1967	12/31/1993
* 2454	SYLVAN	MINNESOTA POWER & LIGHT CO	MON	1800		MN	CROW WING	06/28/1968	12/31/1993
* 2456	AYERS ISLAND	PUBLIC SERVICE CO OF N H	MON	8400		NH	PEMIGEWASSET	03/20/1967	12/31/1993
* 2457	EASTMAN FALLS	PUBLIC SERVICE CO OF N H	MON		4600	NH	PEMIGEWASSET	12/31/1969	12/31/1987
* 2458	PENOBSCOT	GREAT NORTHERN NEKOOSA CORP	MON	0		ME	PENOBSCOT W BR	10/14/1968	12/31/1993
*				8200			PENOBSCOT W BR		
*				8000			PENOBSCOT W BR		
*				16900			PENOBSCOT W BR		
*				7370			PENOBSCOT W BR		
* 2459	LAKE LYNN	WEST PENN POWER CO	MON	51200		WV	CHEAT	10/21/1970	12/31/1993
* 2464	WEED DAM	GRESHAM VILLAGE OF	NOP	630		WI	RED	07/13/1965	06/30/2015
* 2465	HOLIDAYS BRIDGE	DUKE POWER CO	MON	3500		SC	SALUDA	05/09/1967	12/31/1993
* 2466	NIAGARA	APPALACHIAN POWER CO	MON	2400		VA	ROANOKE	03/26/1968	12/31/1993
* 2467	MERCED FALLS	PACIFIC GAS AND ELEC CO	MON	3440		CA	MERCED	07/28/1969	02/28/2014
* 2468	CROTON	CONSUMERS POWER CO	MON	8849		MI	MUSKEGON	05/24/1968	12/31/1993
* 2471	STURGEON RIVER	WISCONSIN ELECTRIC PWR CO	MON	800		MI	STURGEON	11/16/1966	12/31/1993
* 2473	CROWLEY RAPIDS	FLAMBEAU PAPER CORP	MON	1500		WI	FLAMBEAU N FK	09/23/1969	12/31/1993
* 2474	OSWEGO RIVER	NIAGARA MOHAWK POWER CORP	MON	1250		NY	OSWEGO	05/27/1968	12/31/1993
*				8000			OSWEGO		
*				8800			OSWEGO		
* 2475	THORNAPPLE	LAKE SUPERIOR DIST PWR CO	MON	1400		WI	FLAMBEAU	04/22/1965	12/31/1993
* 2476	JERSEY	WISCONSIN PUB SERV CORP	MON	512		WI	TOMAHAWK	08/09/1966	12/31/1993
* 2482	HUDSON	NIAGARA MOHAWK POWER CORP	MON	44400		NY	HUDSON	07/30/1968	12/31/1993
*				28800			HUDSON		
*				3800			HUDSON		
*				4800			HUDSON		
*				2250			HUDSON		
* 2484	GRESHAM	GRESHAM VILLAGE OF	NOP	275		WI	RED	01/16/1974	12/31/1987
* 2485	NORTHFIELD MT	WESTERN MASS ELECTRIC CO	MON	1000000		MA	CONNECTICUT	05/14/1968	04/30/2018
* 2486	PINE	WISCONSIN ELECTRIC PWR CO	MON	3600		WI	PINE	09/26/1967	12/31/1993
* 2487	HOOSIC FALLS	HYDRO-POWER INC	MON	0	1050	NY	HOOSIC RIVER	06/03/1966	12/31/1993
* 2489	CAVENDISH	CENTRAL VERMONT PUBLIC SERVICE CORP	MON	1440		VT	BLACK	06/21/1967	12/31/1993
* 2490	TAFTSVILLE	CENTRAL VERMONT PUBLIC SERVICE CORP	MON	500		VT	OTTAUQUECHEE	06/03/1966	12/31/1993
* 2491	JIM FALLS	NORTHERN STATES POWER CO	MON	14400		WI	CHIPPEWA	03/06/1980	09/26/1983
* 2492	VANCEBORO RES	GEORGIA PACIFIC CORP	MON	0		ME	ST CROIX	04/04/1966	03/01/2016
* 2493	SNOQUALMIE FALLS	PUGET SOUND POWER & LIGHT CO	MON	41690		WA	SNOQUALMIE	05/13/1975	12/31/1993
* 2496	LEABURG	EUGENE CITY OF	MOP	13500		OR	MCKENZIE	06/03/1968	12/31/1993

*	2497	MT TOM MILL	LINWEAVE INC	MOM	500		MA	CONNECTICUT CAN	03/24/1965	02/28/1991
*	2499	UNIONVILLE	RAQUETTE HYDRO POWER LIMITED	MOM	1570		NY	RAQUETTE	11/10/1965	12/31/1993
*	2500	MECHANICVILLE	NIAGARA MOHAWK POWER CORP	MOM	4500		NY	HUDSON	07/31/1968	12/31/1993
*	2503	KEOWEE & JOCASSEE	DUKE POWER CO	MOM	157500		SC	KEOWEE & LITTLE KEOWEE	09/01/1966	08/31/2016
*					612000					
*	2506	ESCANABA	ESCANABA PAPER CO	MOM	1950		MI	ESCANABA	04/12/1976	12/31/1993
*					0			ESCANABA		
*					2500			ESCANABA		
*					4740			ESCANBA		
*	2508	TENTH STREET	NORWICH CITY OF	NOP	1400		CT	SHETUCKET	04/15/1965	12/31/1993
*	2509	SHENANDOAH	POTOMAC EDISON CO	MOM	862		VA	SHENANDOAH S FK	06/17/1966	12/31/1993
*	2510	WALTERVILLE	EUGENE CITY OF	MOP	8000		OR	MCKENZIE	05/23/1967	12/31/1993
*	2512	HAWKS NEST & GLEN FERRIS	ELKEM METALS COMPANY	MOM	5450		WV	KANAWHA	03/09/1967	12/31/1987
*					102600			NEW		
*	2513	ESSEX NO 19	GREEN MOUNTAIN POWER CORP	MOM	7200		VT	WINOOSKI	01/21/1969	12/31/1993
*	2514	BYLLESBY & BUCK	APPALACHIAN POWER CO	MOM	21600		VA	NEW	04/03/1978	12/31/1993
*					8505			NEW		
*	2515	HARPERS FERRY	POTOMAC EDISON CO	MOM	[illegible]		WV	POTOMAC	03/14/1966	12/31/1993
*	2516	DAM NO 4	POTOMAC EDISON CO	MOM	1140	1160	WV	POTOMAC	12/07/1976	12/31/2003
*	2517	DAM NO 5	POTOMAC EDISON CO	MOM	1120		WV	POTOMAC	12/07/1976	12/31/2003
*	2519	NORTH GORHAM	CENTRAL MAINE POWER CO	MOM	2250		ME	PRESUMPSCOT	12/06/1966	12/31/1993
*	2520	MATTACEUNK	GREAT NORTHERN NEKOOSA CORP	MOM	19200		ME	PENOBSCOT	01/09/1967	12/31/1987
*	2522	JOHNSON FALLS	WISCONSIN PUB SERV CORP	MOM	3520		WI	PESHTIGO	08/21/1968	12/31/199
*	2523	OCONTO FALLS	WISCONSIN ELECTRIC PWR CO	MOM	1320		WI	OCONTO	04/14/1967	12/31/199
*	2524	SALINA	GRAND RIVER DAM AUTHORITY	MOP	260000		OK	SALINA CREEK	01/[illegible]3/1976	11/30/201
*	2525	CALDRON FALLS	WISCONSIN PUB SERV CORP	MOM	6400		WI	PESHTIGO	06/[illegible]1/1969	12/31/199
*	2527	SKELTON	CENTRAL MAINE POWER CO	MOM	16800		ME	SACO	08/20/1968	12/31/199
*	2528	CATARACT	CENTRAL MAINE POWER CO	MOM	6650		ME	SACO	08/28/1968	12/31/198
*	2529	BONNY EAGLE	CENTRAL MAINE POWER CO	MOM	7200		ME	SACO	11/19/1970	12/31/199
R *	2530	HIRAM	CENTRAL MAINE POWER CO	MOM	2400 12	8500	ME	SACO	12/22/1982	11/30/202
*	2531	WEST BUXTON	CENTRAL MAINE POWER CO	MOM	2625		ME	SACO	02/06/1968	12/31/198
*					4000			SACO RIVER		
*	2532	LITTLE FALLS	MINNESOTA POWER & LIGHT CO	MOM	3520	1250	MN	MISSISSIPPI	07/01/1969	12/31/199
*	2533	BRAINERD	POTLATCH CORPORATION	MOM	3342		MN	MISSISSIPPI	12/10/1976	12/31/199
*	2534	MILFORD	BANGOR HYDRO-ELECTRIC CO	MOM	6400		ME	PENOBSCOT	12/31/1969	12/31/199
*	2535	STEVENS CREEK	SOUTH CAROLINA ELEC & GASCO	MOM	18880		GA	SAVANNAH	01/20/1970	12/31/1993
*	2536	LIT QUINNESEC FLS	NIAGARA OF WISC PAPER	MOM	8380		WI	MENOMINEE	04/29/1975	06/30/199
*	2538	BEEBEE ISLAND	NIAGARA MOHAWK POWER CORP	MOM	8000		NY	BLACK	05/27/1968	12/31/1993
*	2539	SCHOOL ST COHOES	NIAGARA MOHAWK POWER CORP	MOM	38800		NY	MOHAWK	07/11/1969	12/31/1993

I	2541	CASCADE	UTILITIES HOLDING COMPANY	MOH	825		NC	LITTLE	10/13/1970	12/31/1993
I	2543	MILLTOWN	MONTANA POWER CO THE	MOH	3040		MT	CLARK FK	05/01/1965	12/31/1993
I	2544	MEYERS FALLS	WASHINGTON WATER PWR CO	MOH	1200		WA	COLVILLE	08/24/1970	12/31/1993
I	2545	SPOKANE RIVER	WASHINGTON WATER PWR CO	MOH	14750		WA	SPOKANE	08/17/1972	08/01/2007
I					7200			SPOKANE		
I					10000			SPOKANE		
I					12000			SPOKANE		
I					70000			SPOKANE		
I	2546	SANDSTONE	WISCONSIN PUB SERV CORP	MOH	3840		WI	PESHTIGO	01/14/1969	12/31/1993
I	2548	BLACK	GEORGIA PACIFIC CORP	MOH	855		NY	BLACK	05/10/1979	12/31/1988
I					1050			BLACK		
I					4850			BLACK		
I	2550	WEYAUWEGA	WISCONSIN ELECTRIC PWR CO	MOH	400		WI	WAUPACA	04/26/1968	12/31/1993
I	2551	BUCHANAN	INDIANA AND MICH ELEC CO	MOH	4105		MI	ST JOSEPH	12/15/1975	12/31/1993
I	2552	FORT HALIFAX	CENTRAL MAINE POWER CO	MOH	1500		ME	SEBASTICOOK	09/12/1968	12/31/1993
I	2554	FEEDER DAM	MGREAU MANUFACTURING CORP	MOH	6000		NY	HUDSON	07/31/1968	12/31/1993
I	2555	AUTOMATIC	CENTRAL MAINE POWER CO	MOH	800		ME	MESSALONSKEE	08/30/1968	12/31/1993
I	2556	UNION GAS	CENTRAL MAINE POWER CO	MOH	1500		ME	MESSALONSKEE	08/30/1968	12/31/1993
I	2557	RICE RIPS	CENTRAL MAINE POWER CO	MOH	1600		ME	MESSALONSKEE	12/02/1963	12/31/1993
*	2558	OTTER CREEK	VERMONT MARBLE CO	MOH	1160		VT	OTTER CR	04/26/1976	03/31/2012
*					1400			OTTER CR		
*					3930	3000		OTTER CR		
*	2559	OAKLAND	CENTRAL MAINE POWER CO	MOH	2800		ME	MESSALNOSKEE STREAM	02/24/1949	12/31/1993
*	2560	POTATO RAPIDS	WISCONSIN PUB SERV CORP	MOH	1380		WI	PESHTIGO	08/22/1968	12/31/1993
*	2561	NIANGUA	SHO ME POWER CORP	MOH	3000		MO	NIANGUA	06/11/1975	12/31/1993
*	2564	ORIENTA	LAKE SUPERIOR DIST PWR CO	MOH	400		WI	IRON	10/02/1968	12/31/1993
*	2566	WEBBER	CONSUMERS POWER CO	MOH	2500		MI	GRAND	03/24/1981	04/01/2001
*	2567	WISSOTA	NORTHERN STATES POWER CO	MOH	35280		WI	CHIPPEWA	06/19/1980	06/30/2000
*	2569	BLACK RIVER	NIAGARA MOHAWK POWER CORP	MOH	5400		NY	BLACK	09/15/1977	12/31/1993
*					5400			BLACK		
*					10800			BLACK		
*					6000			BLACK		
*					2000			BLACK		
*	2570	RACINE L & D	OHIO POWER CO	MOH	40000		OH	OHIO	12/27/1973	11/30/2023
*	2572	RIPOGENUS	GREAT NORTHERN PAPER CO	MGN	37530		ME	PENOBSCOT W BR	12/02/1969	12/31/1993
*	2573	MONTEZUMA P S	ARIZONA POWER AUTHORITY	MOP		505400	AZ	OFF STREAM	06/12/1968	09/30/2022
*	2574	LOCKWOOD	MILSTAR MFG CORP	MOH	4800		ME	KENNEBEC	12/31/1969	12/31/1993
*	2576	HOUSATONIC	CONNECTICUT LIGHT & POWER CO	MOH	7200		CT	HOUSATONIC	09/18/1981	07/31/2001
*					30000			HOUSATONIC		
*					37200			HOUSATONIC		
*					30500			HOUSATONIC		

* 2579	TWIN BRANCH	INDIANA AND MICH ELEC CO	MON	7260		IN	ST JOSEPH	06/21/1977	12/31/199
* 2580	TIPPY	CONSUMERS POWER CO	MON	20000		MI	MANISTEE	04/18/1977	12/31/199
* 2581	PESHTIGO	WISCONSIN PUB SERV CORP	MON	584		WI	PESHTIGO	08/08/1968	12/31/199
* 2582	STATION NO 2	ROCHESTER GAS AND EL CORP	MON	6500		NY	GENESEE	06/05/1967	12/31/199
* 2583	STATION NO 5	ROCHESTER GAS AND EL CORP	MON	38250		NY	GENESEE	07/05/1967	12/31/199
* 2584	STATION NO 26	ROCHESTER GAS AND EL CORP	MON	3000		NY	GENESEE	06/30/1967	12/31/19
* 2585	IDOLS	DUKE POWER CO	MON	1410		NC	YADKIN	07/28/1980	07/31/20
* 2586	GANTT	ALABAMA ELECTRIC COOP INC	MON	2440	670	AL	CONECUH	05/19/1980	04/30/20
*				0			CONECUH		
* 2587	SUPERIOR FALLS	LAKE SUPERIOR DIST PWR CO	MON	1320		WI	MONTREAL	10/09/1968	12/31/19
* 2588	LITTLE CHUTE	KAUKAUNA CITY OF	MOP	3300		WI	FOX	08/22/1980	07/31/20
* 2589	MARQUETTE	MARQUETTE CITY OF	MOP	3200		MI	DEAD	07/30/1961	07/30/20
*				0			DEAD		
*				700			DEAD		
* 2590	WISCONSIN RIVER DIVISION	CONSOLIDATED WATER PWR CO	MON	1800		WI	WISCONSIN	01/.6/19.5	06/30/19
* 2593	BEAVER RIVER	BEAVER FALLS POWER CO	MON	1500		NY	BEAVER	08/26/1968	12/31/19
* 2594	LAKE CREEK	MONTANA LT AND PWR	MON	4500		MT	LAKE CR	12/16/1981	11/30/20
* 2595	HIGH FALLS	WISCONSIN PUB SERV CORP	MON	7000		WI	PESHTIGO	01/12/1976	12/31/19
* 2596	STATION NO 160	ROCHESTER GAS AND EL CORP	MON	340		NY	GENESEE	04/13/1978	12/31/19
* 2597	FALLS VILLAGE	CONNECTICUT LIGHT & POWER CO	MON	9000		CT	HOUSATONIC	08/28/1981	08/30/20
* 2599	HODENPYL	CONSUMERS POWER CO	MON	18000		MI	MANISTEE	02/03/1976	12/31/19
* 2600	STANFORD	BANGOR HYDRO-ELECTRIC CO	MON	3800		ME	PENOBSCOT	02/03/1970	12/31/19
* 2601	BRYSON	NANTAHALA PWR AND LT CO	MON	980		NC	OCONALUFTEE	07/22/1980	07/31/20
* 2602	DILLSBORO	NANTAHALA PWR AND LT CO	MON	225		NC	TUCKASEGEE	07/17/1980	07/31/20
* 2603	FRANKLIN	NANTAHALA PWR AND LT CO	MON	1040		NC	LITTLE TENNESSEE	07/22/1980	07/31/20
* 2607	SPENCER MOUNTAIN	DUKE POWER CO	MON	640		NC	SOUTH FORK	03/02/1970	12/31/19
* 2608	WEST SPRINGFIELD	PREMOID CORP ET AL	MON	0		MA	WESTFIELD	09/09/1968	12/31/19
* 2609	PALMER FALLS & CURTIS	INTERNATIONAL PAPER CO	MON	5000	10300	NY	HUDSON	05/22/1980	04/30/20
*				7500	48000		HUDSON		
* 2610	SAXON FALLS	LAKE SUPERIOR DIST PWR CO	MON	1250		MI	MONTREAL	12/10/1968	12/31/19
* 2611	WINSLOW	SCOTT PAPER CO	MON	3730		ME	KENNEBEC	07/01/1969	12/31/19
* 2612	FLAGSTAFF RES	CENTRAL MAINE POWER CO	MON	0		ME	DEAD	04/12/1979	12/31/19
* 2613	MOXIE RES	MADISON PAPER INDUSTRIES	MON	0		ME	MOXIE	06/11/1969	12/31/19
* 2614	GREENUP	VANCEBURG CITY OF	MOP	70560		OH	OHIO	03/29/1976	02/28/20
* 2615	BRASSUA RES	MADISON PAPER INDUSTRIES	MON	0		ME	MOOSE	09/16/1977	12/31/19
* 2616	HOOSIC	NIAGARA MOHAWK POWER CORP	MON	4800		NY	HOOSIC	01/22/1969	12/31/19
*				13120			HOOSIC		
* 2618	GRAND LAKE RES	GEORGIA PACIFIC CORP	MON	0		ME	ST CROIX W BR	09/04/1980	09/30/20

*								WEST BRANCH, ST CROIX		
*	2619	MISSION	NANTAHALA PWR AND LT CO	MON	1800		NC	HIWASSEE	08/04/1980	08/31/2005
*	2620	LOCKHART	LOCKHART POWER CO	MON	12300		SC	BROAD	04/18/1980	03/31/2000
*	2621	PACOLET S C	PACOLET MANUFACTURING CO	MON	800		SC	PACOLET	02/05/1982	01/31/2012
*	2622	TURNERS FALLS	HAMMERMILL PAPER CO	MON	937		MA	CONNECTICUT CAN	02/25/1969	02/28/1991
*	2628	R L HARRIS	ALABAMA POWER CO	MON		135000	AL	TALLAPOOSA	12/27/1973	11/30/2023
*	2629	MORRISVILLE	MORRISVILLE VILLAGE OF	MOP	2000		VT	LAMOILLE	08/28/1982	04/30/2015
*					0			LAMOILLE		
*						2500		GREEN RIVER		
*					1800			LAMOILLE		
*					1300			LAMOILLE		
*	2630	PROSPECT 1,2 & 4	PACIFIC POWER & LIGHT CO	MON	36750		OR	ROGUE	07/28/1980	07/01/2005
*	2631	WORONOCO	HAMMERMILL PAPER CO	MON	2690		MA	WESTFIELD	06/02/1981	09/01/2001
*	2634	GREAT NORTHERN STORAGE	GREAT NORTHERN NEKOOSA CORP	MON			ME	PENOBSCOT W BR	04/18/1980	04/30/2000
*								RAGGED		
*								CAUCOMGOMOC		
*					0			PENOBSCOT W BR		
*	2639	CORNELL	NORTHERN STATES POWER CO	MON	30750		WI	CHIPPEWA	12/26/1973	11/30/2023
*	2640	UPPER HYDRO	FLAMBEAU PAPER CORP	MON	900		WI	FLAMBEAU N FK	08/05/1976	12/31/1993
*	2643	BEND	PACIFIC POWER & LIGHT CO	MON	1110		OR	DESCHUTES	05/01/1965	12/31/1993
*	2644	KANSAS RIVER	BOWERSOCK MLS AND PWR CO	MON	1850		KS	KANSAS	03/24/1977	12/31/1987
*	2645	BEAVER	NIAGARA MOHAWK POWER CORP	MON	4500		NY	BEAVER	07/03/1978	12/31/1993
*					1500			BEAVER		
*					8000			BEAVER		
*					4800			BEAVER		
*					1800			BEAVER		
*					6050			BEAVER		
*					15000			BEAVER		
*					2960			BEAVER		
*	2651	ELKHART	INDIANA AND MICH ELEC CO	MON	3440		IN	ST JOSEPH	05/08/1980	05/31/2000
*	2652	BIG FORK	PACIFIC POWER & LIGHT CO	MON	4150		MT	SWAN	09/24/1976	04/30/1990
*	2655	EAGLE & PHENIX	FIELDCREST MILLS INC	MON	4260		GA	CHATTAHOOCHEE	09/12/1978	12/31/1993
*	2659	POWERDALE	PACIFIC POWER & LIGHT CO	MON	6000		OR	HOOD	03/14/1980	02/28/2000
*	2660	FORREST CITY RES	GEORGIA PACIFIC CORP	MON	0		ME	ST CROIX E BR	08/27/1980	08/31/2000
*	2661	HAT CREEK NO 1 & NO 2	PACIFIC GAS AND ELEC CO	MON	10100		CA	HAT CR	10/29/1975	09/30/2000
*					10000			HAT CR		
*	2662	SCOTLAND	CONNECTICUT LIGHT & POWER CO	MON	2000		CT	SHETUCKET	10/05/1982	08/31/2012
*	2663	PILLAGER	MINNESOTA POWER & LIGHT CO	MON	1520		MN	CROW WING	08/14/1983	05/11/1997
*	2666	MEDWAY	BANGOR HYDRO-ELECTRIC CO	MON	3440		ME	PENOBSCOT W BR	03/29/1979	03/31/1999
*	2669	BEAR SWAMP P S	NEW ENGLAND POWER CO	MON	11250		MA	DEERFIELD RIVER	04/28/1970	03/31/2020
*					600000			DEERFILED RIVER		
*	2670	DELLS	N STATES PWR CO & CITY OF EAU CLAIRE	MOP	10200		WI	CHIPPEWA	09/30/1980	09/20/2000

*	2671	MOOSEHEAD LAKE	KENNEBEC WATER POWER COMP/NY	MOM	0		ME	KENNEBEC	08/05/1976	12/31/1993
*	2674	VERGENNES NO 9	GREEN MOUNTAIN POWER CORP	MOM	2400		VT	OTTER CR	06/29/1979	05/31/1999
*	2677	BADGER-RAPIDE CROCHE	KAUKAUNA CITY OF	MOP	2000		WI	FOX	06/07/1977	10/31/1988
*					3600			FOX		
*					2400			FOX		
*	2680	LUDINGTON P. S.	CONSUMERS & DETROIT EDISON	MOM	1657500		MI	LAKE MICHIGAN	07/30/1969	06/30/2019
*	2684	ARPIN	NORTH CENTRAL POWER CO	MOM	1570		WI	CHIPPEWA EAST FK	06/03/1969	04/30/2019
*	2685	BLENHEIM&GILBOA P S	POWER AUTHORITY OF THE STATE OF NY	MOP	1000000		NY	SCHOHARIE CR	06/05/1969	04/30/2019
*	2686	WEST FORK	NANTAHALA PWR AND LT CO	MOM	3000		NC	TUCKASEGEE W FK	01/28/1981	01/30/2006
*					21600			TUCKASEGEE W FK		
*	2687	PIT NO 1	PACIFIC GAS AND ELEC CO	MOM	63000		CA	FALL CR	11/06/1970	12/31/1995
*	2689	OCONTO FALLS	SCOTT PAPER CO	MOM	1860		WI	OCONTO RIVER	01/18/1973	12/31/1993
*	2692	NANTAHALA	NANTAHALA PWR AND LT CO	MOM	43200		NC	NANTAHALA	02/06/1981	02/28/2006
*	2694	QUEENS CREEK	NANTAHALA PWR AND LT CO	MOM	1440		NC	QUEENS CREEK	10/20/1976	09/30/2001
*	2696	STUYVESANT FALLS	NIAGARA MOHAWK POWER CORP	MOM	2800		NY	KINDERHOOK CR	08/07/1980	08/30/2005
*	2697	CEDAR FALLS	NORTHERN STATES POWER CO	MOM	6000		WI	RED CEDAR RIVER	01/06/1981	01/30/2001
*	2698	EAST FORK	NANTAHALA PWR AND LT CO	MOM	10800		NC	TUCKASEGEE E FK	01/23/1981	02/01/2006
*					9000			TUCKASEGEE E FK		
*					6375			TUCKASEGEE E FK		
*	2699	ANGELS	PACIFIC GAS AND ELEC CO	MOM	1400		CA	ANGELS CR	11/06/1970	12/31/1995
*	2701	TRENTON FALLS & PROSPECT	NIAGARA MOHAWK POWER CORP	MOM	24200	6000	NY	CANADA CR W	03/18/1983	02/28/2023
*					17325			CANADA CR W		
*	2705	NEWHALEM	SEATTLE DEPT OF LIGHTING	MOP	1750		WA	NEWHALEM CR	01/01/1970	12/31/1994
*	2709	DAVIS P S	MONONGAHELA PWR CO ET AL	MOM		1000000	WV	BLACKWATER RIVER	04/21/1977	03/31/2027
*	2710	ORONO	BANGOR HYDRO-ELECTRIC CO	MOM	2332		ME	STILLWATER	11/10/1977	12/31/1993
*	2711	TREGO	NORTHERN STATES POWER CO	MOM	1200		WI	NAMEKAGON	03/11/1977	03/31/1993
*	2712	STILLWATER	BANGOR HYDRO-ELECTRIC CO	MOM	1950		ME	PENOBSCOT STILLWATER BR	08/10/1978	12/31/1993
*	2713	OSWEGATCHIE	NIAGARA MOHAWK POWER CORP	MOM	560	0	NY	OSWEGATCHIE	01/10/1983	12/31/2012
*					1040	0		OSWEGATCHIE		
*					2700			OSWEGATCHIE		
*					2680			OSWEGATCHIE		
*					6000			OSWEGATCHIE		
*					15000			OSWEGATCHIE		
*	2715	COMBINED LOCKS	KAUKAUNA CITY OF	MOM	2890		WI	FOX	09/23/1980	09/30/2000
*	2716	BATH COUNTY	VIRGINIA ELECTRIC & POWER CO	MOM		2100000	VA	LITTLE BACK CR	01/10/1977	08/31/2026
*	2721	HOWLAND	BANGOR HYDRO-ELECTRIC CO	MOM	1875		ME	PISCATAQUIS	09/12/1980	09/30/2000
*	2722	PIONEER	UTAH POWER & LIGHT CO	MOM	5000		UT	OGDEN	10/10/1980	08/31/2000

*	2724	HAMILTON	HAMILTON CITY OF	MOP	1500		OH	MIAMI	09/04/1981	09/29/2081
*	2725	ROCKY MOUNTAIN P S	GEORGIA POWER CO	MON		675000	GA	HEATH CREEK	01/21/1977	12/31/2026
*	2726	MALAD	IDAHO POWER CO	MON	7200		ID	MALAD	08/09/1979	07/31/2004
*					13500			MALAD		
*	2727	ELLSWORTH & GRAHAM	BANGOR HYDRO-ELECTRIC CO	MON	0		ME	UNION	04/12/1977	12/31/1987
*					8900			UNION		
*	2731	WEYBRIDGE	CENTRAL VERMONT PUBLIC SERVICE CORP	MON	3000		VT	OTTER	03/12/1980	05/31/1980
*	2735	HELMS PUMPED STORAGE	PACIFIC GAS AND ELEC CO	MON		1050000	CA	HELMS CR	05/18/1976	04/30/2026
*	2736	AMERICAN FALLS	IDAHO POWER CO	MON	92400		ID	SNAKE	03/31/1975	02/28/2025
*	2737	MIDDLEBURY&LOWER	CENTRAL VERMONT PUBLIC SERVICE CORP	MON	2250		VT	OTTER CREEK	07/08/1980	07/01/2000
*	2738	SARANAC	NEW YORK ST EL AND G CORP	MON	2250	3400	NY	SARANAC	09/23/1980	04/12/2006
*					6400	4200		SARANAC		
*					2400			SARANAC		
*					14100			SARANAC		
*	2739	MELDAHL	VANCEBURG CITY OF	MOP		70300	KY	OHIO	03/05/1982	02/29/2032
*	2740	BAD CREEK P.S.	DUKE POWER CO	MON		1000000	SC	WHITEWATER	08/01/1977	07/31/2027
*	2741	PINE FLAT	KINGS RIVER CONSERVATION DIST	MON		165000	CA	KINGS RIVER	09/25/1979	08/31/2029
*	2742	SOLOMON GULCH	COPPER VALLEY ELEC ASSN INC	MON	18000		AK	SOLOMON	06/21/1978	05/31/2028
*	2743	TERROR LAKE	ALASKA POWER AUTHORITY	MON		20000	AK	TERROR	10/05/1981	10/31/2031
*	2758	CROCKER MILL	LINWEAVE INC	MON	280		MA	CONN	06/07/1977	02/28/1991
*	2766	ALBIN MILL (D WHEEL)	LINWEAVE INC	MON	400		MA	CONNECTICUT	07/06/1977	02/28/1991
*	2768	ALBIN MILL (A WHEEL)	LINWEAVE INC	MON	250		MA	CONNECTICUT	07/06/1977	02/28/1991
*	2769	RAYSTOWN LAKE	ALLEGHENY ELEC COOP & PENN ELEC CO	MON		20300	PA	JUNIATA	11/10/1982	10/30/2032
*	2770	CROCKER MILL (C WHEEL)	LINWEAVE INC	MON	240		MA	CONNECTICUT	07/06/1977	02/28/1991
*	2771	HONOTUCK MILL	LINWEAVE INC	MON	400		MA	CONNECTICUT	07/06/1977	02/28/1991
*	2772	LINWEAVE WAREHSE(A WHEEL)	LINWEAVE INC	MON	460		MA	CONNECTICUT	07/06/1977	02/28/1991
*	2775	LINWEAVE WAREHSE(D WHEEL)	LINWEAVE INC	MON	360		MA	CONNECTICUT	07/06/1977	02/28/1991
*	2777	UPPER SALMON	IDAHO POWER CO	MON	34500		ID	SNAKE	06/13/1979	05/31/1999
*	2778	SHOSHONE FALLS	IDAHO POWER CO	MON	12400		ID	SNAKE	06/13/1979	05/31/1999
*	2780	MONTICELLO	SOLANO IRRIGATION DIS	MOP		11500	CA	PUTAH CR	01/29/1981	01/01/2031
*	2782	RED CREEK	PAROWAN CITY CORPORATION	MOP	500		UT	RED CREEK	04/13/1978	04/30/2003
*	2788	COLLIERSVILLE	STAPENHORST F W E INC	MON	1450		NY	SUSQUEHANNA	03/13/1979	02/28/2019
*	2790	LOWELL HYDRO	BOOTT MILLS ETAL	MON		15000	MA	MERRIMACK	04/13/1983	04/30/2023
*					530	265		MERRIMACK CANAL		
*					1180			HAMILTON CANAL		
*					2100	400		EASTERN CANAL		
*					1080			EASTERN CANAL		
*					1250	1110		EASTERN CANAL		
*	2794	PICKELL, J.W.	PICKELL JACK W	MON	20		ID	SLAUGHTER CREEK	08/16/1979	08/30/2006
*	2800	LAWRENCE	LAWRENCE HYDRO ASSOC	MON	16800		MA	MERRIMACK	12/04/1978	11/30/2028
*	2801	GLENDALE	HEATHER MARY C	MON	0		MA	HOUSATONIC	11/23/1979	10/31/2609
*	2804	GOOSE	MAINE HYDRO DEV CORP	MON	54		ME	GOOSE	03/24/1980	02/29/2020
*					55			GOOSE		
*						75		GOOSE		
*					0			GOOSE		

M					200		GOOSE		
M 2808	BARKERS MILL	MAINE HYDRO DEV CORP	MON	1500		ME	LITTLE ANDROSCOGGIN	02/23/1979	01/31/2019
M 2809	AMERICAN TISSUE	GARDINER HYDRO COMPANY	MON	900		ME	COBBOSSEECONTEE	05/09/1975	04/30/2019
M 2814	GREAT FALLS	PATTERSON CITY OF	MOP		7500	NJ	PASSAIC	03/11/1981	02/28/2021
M 2816	NORTH HARTLAND	VERMONT ELEC GEN & TRANS COOP INC	MON		4000	VT	OTTAUQUECHEE RIVER	11/24/1981	11/30/2021
M 2818	GREEN LAKE	SITKA CITY & BOROUGH OF	MOP	16500		AK	VODOPAD	04/05/1979	03/31/2029
M 2821	PORTLAND NO 1 & NO 2	PORTLAND CITY OF	MOP	13750		OR	BULL RUN	03/22/1979	02/28/2029
M				11875			BULL RUN		
M 2823	BOISE CASCADE	BEAVER FALLS POWER CO	MON	1000		NY	BEAVER	10/18/1979	09/30/2019
M 2829	LOVELAND	LOVELAND CITY OF	MOP	900		CO	BIG THOMPSON R	06/30/1978	03/07/2016
M 2832	LUCKY PEAK	BOISE PROJ BD OF CONTROL	MON		67500	ID	BOISE	06/10/1980	05/31/2030
M 2835	RAINBOW FALLS & TAYLOR POND	NEW YORK ST EL AND G CORP	MON	0		NY	BLACK BROOK	11/26/1982	10/31/2002
M				2112			AUSABLE		
M 2837	GRANBY	NIAGARA MOHAWK POWER CORP	MON	10000		NY	OSWEGO	04/07/1980	03/31/2020
M 2839	GREAT FALLS	LYNDONVILLE VILLAGE OF	MOP	1200		VT	PASSUMPSIC	06/29/1979	05/31/2019
M 2840	P.E.C. HEADWORKS	QUINCY-COLUMBIA BASIN IRRIGAT DIST	MOP		6500	WA	POTHOLES EAST CANAL	09/21/1982	09/30/2032
M 2841	LAKE MENDOCINO	UKIAH CITY OF	MOP		3500	CA	EAST FORK RUSSIAN RIVER	04/10/1982	03/31/2032
M 2842	IDAHO FALLS	IDAHO FALLS CITY OF	MOP	11000		ID	SHAKE	02/08/1979	01/31/2029
M				8000			SHAKE		
M				8000			SHAKE		
M 2848	CASCADE	IDAHO POWER CO	MON		12000	ID	PAYETTE N FK	02/17/1981	01/31/2031
M 2849	MAIN CANAL HEADWORKS	QUINCY-COLUMBIA BASIN IRRIGAT DIST	MOP		18000	WA	MAIN CANAL	11/16/1981	11/30/2031
M 2850	EMERYVILLE	HAMPSHIRE PAPER COMPANY	MON	1740		NY	OSWEGATCHIE	06/17/1982	05/31/2012
M 2851	NATURAL DAM	JAMES RIVER-GROVETON INC	MON	1020		NY	OSWEGATCHIE	04/13/1982	04/30/2012
M 2852	KEUKA	NEW YORK ST EL AND G CORP	MON	2000		NY	LAMOKA	03/14/1983	02/28/2003
M 2854	OLD RIVER	VIDALIA TOWN OF	MOP		192000	LA	MISSISSIPPI RIVER	01/27/1982	12/31/2031
M 2861	PONTOOK	SHAW ROBERT	MON		8575	NH	ANDROSCOGGIN	10/02/1981	09/30/2031
M 2866	LOCKPORT	METRO SAN DIST GR CHICAGO	MOP	13500		IL	CHICAGO SAN & SHIP CANAL	12/04/1981	11/30/2001
M 2874	BARREN RIVER	GLASGOW CITY OF	MOP		6750	KY	BARREN RIVER	09/16/1983	08/31/2033
M 2879	BOLTON FALLS	GREEN MOUNTAIN POWER CORP	MON		8790	VT	WINOOSKI	02/05/1982	01/31/2022
M 2880	CHEROKEE FALLS	BROAD RIVER EL COOPE	MON		3500	SC	BROAD RIVER	08/03/1981	07/31/2021
M 2883	FRIES	RIEGAL TEXTILE CORP	MON	7017		VA	NEW RIVER	06/10/1980	06/01/2020
M 2888	WHISKEY TOWN	REDDING CITY OF	MOP		3240	CA	CLEAR CREEK	03/10/1983	02/28/2023
M 2890	DINKEY CREEK	KINGS RIVER CONSERVATION DIST	MOP		120000	CA	KINGS	03/22/1982	02/29/2032
M 2891	JACKSON BLUFF	TALLAHASSEE CITY OF	MOP		10900	FL	OCHLOCKONEE	07/14/1982	06/30/2022
M 2892	FRIANT POWER PROJECT	FRIANT POWER AUTHORITY	MOP		40000	CA	SAN JOAQUIN RIVER	09/30/1982	08/31/2032
M 2893	SAXTONS RIVER	BSR COMPANY INC	MON		1500	VT	SAXTONS RIVER	03/11/1982	02/29/2032
M 2894	BLACK BROOK	NORTHWESTERN WIS ELEC CO	MON	650		WI	APPLE	01/22/1980	12/31/2020
M 2895	APPLETON UPPER DAM	KIMBERLY-CLARK CORP	MON		900	WI	FOX RIVER	08/10/1982	07/31/2022

* 2897	SACCARAPPA	S D WARREN COMPANY	MOM	1350		ME	PRESUMPSCOT	10/31/1979	10/01/1999
* 2901	HOLCOMB ROCK	OWENS-ILLINOIS INC	MOM	1875		VA	JAMES	01/29/1981	01/31/2001
* 2902	BIG ISLAND	OWENS-ILLINOIS INC	MOM	960		VA	JAMES	12/08/1980	01/01/2001
* 2903	NEW HOGAN	CALAVERAS COUNTY WATER DISTRICT	MOP		2500	CA	CALAVERAS RIVER	11/22/1982	10/31/2032
* 2905	ENOSBERG FALLS	VERMONT PUB PWR SUP AUTH	MOP	750	2000	VT	MISSISQUOI RIVER	07/12/1983	04/30/2023
* 2907	DRY CREEK	SAVAGE TERRY & CELIA	MOM		12	MT	DRY CREEK	09/26/1979	08/31/2029
* 2911	SWAN LAKE	ALASKA POWER AUTHORITY	MOP		22000	AK	FALLS CREEK	07/17/1980	07/01/2030
* 2912	DEMOPOLIS	ALABAMA ELECTRIC COOP INC	MOM	0	37500	AL	TOMBIGBEE RIVER		
* 2916	LOWER MOKELUMNE	EAST BAY MUNICIPAL UTIL DIST	MOP	18750	9900	CA	LOWER MOKELUMNE	03/10/1981	03/31/2031
*					10600				
* 2926.	RUSSELL D. SMITH	QUINCY-COLUMBIA BASIN IRRIGAT DIST	MOP	5000		WA	POTHOLES EAST CANAL	03/27/1980	02/28/2030
* 2927	AQUAMAC	AQUAMAC CORPORATION	MOM	250		MA	MERRIMACK	10/31/1979	10/01/1999
* 2928	MERRIMACK	MERRIMACK PAPER COMPANY	MOM	130		MA	MERRIMACK	12/27/1979	10/30/1999
*				400			MERRIMACK		
*				550			MERRIMACK		
* 2930	NORTH FORK PAYETTE RIVER	IDAHO POWER CO	MOM		174000	ID	NORTH FORK PAYETTE RIVER	06/28/1982	05/31/2032
*					99000		NORTH FORK PAYETTE RIVER		
* 2931	GAMBO	S D WARREN COMPANY	MOM	1900		ME	PRESUMPSCOT	09/30/1980	09/30/2000
* 2932	MALLISON FALLS	S D WARREN COMPANY	MOM	800		ME	PRESUMPSCOT	05/14/1980	05/31/2000
* 2934	UPPER MECHANICVILLE	NEW YORK ST EL AND G CORP	MOM	16800		NY	HUDSON	04/27/1981	03/31/2021
* 2935	GRANITEVILLE	GRANITEVILLE COMPANY	MOM	1200		GA	AUGUSTA CANAL	12/26/1981	09/30/2001
* 2937	QUINCY CHUTE	QUINCY-COLUMBIA BASIN IRRIGAT DIST	MOP	0	7800	WA	WEST CANAL OF USBR	08/20/1982	07/31/2032
* 2941	LITTLE FALLS	S D WARREN COMPANY	MOM	1000		ME	PRESUMPSCOT	05/28/1980	05/31/2000
* 2942	DUNDEE	S D WARREN COMPANY	MOM	2400		ME	PRESUMPSCOT	09/17/1981	09/30/2001
* 2952	GEM STATE	IDAHO FALLS CITY OF	MOP	0	22300	ID	SNAKE RIVER	12/12/1983	11/30/2023
* 2954	GIBRALTER	SANTA BARBARA CITY OF	MOP		1500	CA	SANTA YNEZ R	04/13/1981	04/01/2031
* 2955	NORMANSKILL	WATERVLIET CITY OF	MOP		850	NY	NORMANS KILL	03/05/1982	02/28/2022
* 2956	MADERA CANAL	MADERA-CHOWCHILLA POWER AUTHORITY	MOP	0	1300	CA	MADERA CANAL	06/08/1982	05/31/2032
*				0	675		MADERA CANAL		
*				0	800		MADERA CANAL		
* 2959	TOLT RIVER - SOUTH FORK	SEATTLE DEPT OF LIGHTING	MOP		15000	WA	SOUTH FORK TOLT RIVER	03/29/1984	02/28/2024
* 2960	GONZALES	GONZALES CITY OF	MOP	1140		TX	GUADALUPE	08/25/1980	07/31/2020
* 2964	STURGIS	STURGIS CITY OF	MOP	2720		MI	ST JOSEPH	04/17/1980	03/31/2000
* 2966	CLEMENT DAM	KATSEKAS JAMES C & DIMOS ZOES	MOM		2400	NH	WINNIPESAUKEE RIVER	05/17/1982	04/30/2032
* 2972	WOONSOCKET FALLS	WOODSOCKET CITY OF	MOP		1100	RI	BLACKSTONE RIVER	11/06/1980	11/30/2020
* 2975	SAND BAR	OAKDALE & SOUTH SAN JOAQUIN I D S	MOP		15600	CA	MIDDLE FORK STANISLAUS RIVER	09/08/1983	08/31/2033
* 2984	EEL WEIR	S D WARREN COMPANY	MOM	1800		ME	PRESUMPSCOT	03/16/1984	03/31/2004
* 2985	WILLOW MILL	MEAD CORP	MOM		465	MA	HOUSATONIC	05/01/1981	04/30/2011
* 2987	CORNWELL	CORNWELL HOWARD W & VERNA JEAN	MOM		12	CA	MERRIL	05/07/1980	04/30/2030
* 2997	CAMP FAR WEST	SOUTH SUTTER WATER DISTRICT	MOP		6800	CA	BEAR RIVER	07/02/1981	07/01/2021
* 3010	CENTERVILLE	VALLEY INDUSTRIES INC	MOM		155	RI	SO.BR. PAWTUXUENT RIBER	01/25/1983	12/31/2022

3011	ARCTIC	ARCTIC DEVELOPMENT CORP	MON		373	RI	PAWTUXET RIVER	01/25/1983	12/21/2022
3012	SAYBROOKE	SAYBROOKE MANUFACTURING CO	MON		235	RI	SOUTH BRANCH PATUXET RIVER	01/25/1983	12/31/2023
3013	NATICK DAM	QUIDNIC RESERVOIR CO	MON		522	RI	PAWTUXET RIVER	07/06/1983	06/30/2023
3015	TYEE LAKE	ALASKA POWER AUTHORITY	MOP		20000	AK	TYEE LAKE	09/29/1981	07/31/2031
3017	JETTY LAKE	MATHEWS RICH & SMITH PETER	MON	50	50	AK	JETTY LAKE	08/05/1981	06/30/2030
3023	TUPPERWARE	DART INDUSTRIES	MON		1724	RI	BLACK STONE	10/24/1980	09/30/2020
3024	HOLLYWOOD	RICHMOND CITY OF	MOP	2075		VA	JAMES RIVER-KANAWHA CANAL	08/06/1982	07/31/2002
3029	BYRD PARK	RICHMOND CITY OF	MOP	1125		VA	JAMES	08/12/1982	07/31/2002
3030	ELK RAPIDS	ANTRIM COUNTY	MOP		700	MI	ELK	02/09/1981	03/01/2001
3031	GARLAND CANAL	SHOSHONE IRRIGATION DISTRICT	MOP	2400		WY	GARLAND CANAL	10/09/1981	09/30/2031
3033	DAM NO. 2	ARKANSAS ELECTRIC COOP CORP &	MON		120000	AR	ARKANSAS RIVER	08/10/1983	07/31/2033
3034	LOCK AND DAM NO.3	ARKANSAS ELECTRIC COOP &	MON		48000	AR	ARKANSAS RIVER	08/10/1983	07/31/2033
3036	NORTH MISSISSIPPI	MUNICIPAL ENERGY AGENCY OF MISS	MOP		16000	MS	LITTLE TALLAHATCHIE RIVER	04/15/1983	03/31/2033
					7500		YACONA RIVER		
					7700		COLDWATER RIVER		
					13200		YALOBUSHA RIVER		
3037	ELIZABETH WEBBING MILLS	ROOSEVELT HYDRO ELECTRIC COMPANY	MON	700		RI	BLACKSTONE RIVER	07/13/1981	06/30/2021
3038	SUCCESS	LOWER TULE RIVER IRR DIST	MOP		1400	CA	TULE RIVER	08/22/1983	07/31/2033
3041	HETTINGER	MACKAY BAR CORP	MON	12		ID	SMITH CR	11/14/1980	10/31/2010
3043	LOCK & DAM NO. 13	ARKANSAS ELECTRIC COOP CORP &	MON		33200	AR	ARKANSAS RIVER	10/18/1983	09/30/2083
3044	LOCK & DAM NO. 9	ARKANSAS ELECTRIC COOP CORP &	MOP		42400	AR	ARKANSAS RIVER	07/20/1983	06/30/2033
3052	BLACK RIVER FALLS	BLACK RIVER FALLS CITY OF	MOP	920		WI	BLACK RIVER	08/28/1981	08/30/2001
3063	CENTRAL FALLS	GELARDIN BRUNER COTT INC	MON		818	RI	BLACKSTONE RIVER	08/28/1981	07/31/2021
3073	CLIFFORD ROSENBALM	ELLIS WAYNE R	MON	8		ID	BEAR CR	10/31/1980	12/31/2004
3074	UPRIVER	SPOKANE CITY OF	MOP	5550	9000	WA	SPOKANE	06/04/1981	05/31/2031
3090	LYNDONVILLE,VILLAGE OF	LYNDONVILLE VILLAGE OF	MOP	350		VT	PASSUMPSIC	01/23/1981	02/01/2001
3102	HIGH SHOALS	BRACEWELL GAYNOR L	MON	1000	1000	GA	APALACHEE	08/07/1981	08/30/2021
3107	NEWFOUND	NEWFOUND HYDROELECTRIC COMPANY	MON		1467	NH	NEWFOUND RIVER	11/06/1981	10/31/2031
3131	BROCKWAYS MILLS	WILLIAMS RIVER ELECTRIC CORP	MON		1115	VT	WILLIAMS RIVER	01/20/1983	12/31/2032
3133	ERROL	PUBLIC SVC CO OF NH & UNION WTR PWP	MON		2010	NH	ANDROSCOGGIN RIVER	08/29/1983	07/31/2023
3155	CARBONTON DAM	JORDAN JOHN M	MON		1000	NC	DEEP RIVER	07/09/1982	06/30/2022
3156	WORTHVILLE DAM	JORDAN JOHN M	MON	0	280	NC	DEEP RIVER	10/28/1982	09/30/2022
3166	NATIONAL FIBER UPPER	NATIONAL FIBER INSULATION CO INC	MON	0	63	MA	SWIFT RIVER	04/29/1982	03/31/2022
3174	VALLECITO	PTARMIGAN RESOURCES & ENERGY INC	MON		2350	CO	LOS PINOS RIVER	10/05/1983	09/30/2033
3189	ROCK CREEK	KEATING JOSEPH M	MON		3000	CA	ROCK CREEK	04/29/1983	03/31/2033
3190	BLACK BUTTE	SANTA CLARA CITY OF	MOP		6800	CA	STONY CREEK	05/05/1983	04/30/2033
3193	STONY GORGE	SANTA CLARA CITY OF	MOP	0	3900	CA	STONY CREEK	08/31/1982	07/31/2032
3195	SAYLES FLAT	KEATING JOSEPH M	MON		2950	CA	SOUTH FORK AMERICAN RIVER	09/26/1983	08/31/2033

3202	AVALON DAM	JORDON JOHN M	MOH	0	600	NC	MAYO RIVER	05/14/1982	04/30/2022
3203	MAYO DAM	JORDAN JOHN M	MOH	0	500	NC	MAYO RIVER	10/18/1982	09/30/2022
3207	CONEMAUGH	SALTSBURG BOROUGH OF & SEE REMARKS	MOH		14000	PA	CONEMAUGH RIVER	06/16/1982	05/31/2032
3211	HINCKLEY	POWER AUTHORITY OF THE STATE OF NY	MOP		9000	NY	WEST CANADA CREEK	08/12/1982	07/31/2002
3228	MAHONING	ATLANTIC POWER DEVELOPMENT CORP.	MOH		5000	PA	MAHONING CREEK	01/26/1984	12/31/2034
3251	CORNELL UNIVERSITY	CORNELL UNIVERSITY	MOH	1500		NY	FALL CREEK	07/28/1981	06/30/2021
3253	CAMPTON HYDRO	DOLE & ROBERTS SALES CORP	MOH		382	NH	MAD RIVER	11/09/1982	10/31/2022
3255	LYONSDALE	LYONSDALE ASSOCIATES	MOH		3000	NY	MOOSE RIVER	03/22/1983	02/28/2023
3267	BALLARD MILL	GREATER MALONE COMMUNITY COUNCIL IN	MOH	125	150	NY	SALMON RIVER	04/19/1982	03/31/2022
3273	CHITTENDEN FALLS	CHITTENDEN FALLS HYDRO POWER INC	MOH		550	NY	KINDERHOOK CREEK	06/2[illegible]/198[illegible]	05/31/2021
3286	BEAR CREEK	PUGET SOUND POWER & LIGHT CO	MOH		4000	WA	BEAR CREEK	12/1[illegible]/1982	11/30/2023
3295	SUMMER FALLS	SOUTH COLUMBIA IRRIGATION DISTRICT	MOP		74000	WA	MAIN CANAL	08/14/1981	07/31/2031
3307	TIONESTA LAKE	HYDRO CORPORATION OF PENNSYLVANIA	MOH		5000	PA	TIONESTA CREEK	01/26/1984	12/31/2033
3309	NASH MILL	COHEN ARTHUR	MOH		90	NH	ASHUELOT RIVER	12/30/1982	11/30/2022
3342	PENACOOK LOWER FALLS	NEW HAMPSHIRE HYDRO ASSOCIATES	MOH	4000		NH	CONTOOCOOK RIVER	11/17/1982	10/31/2022
3409	BOYNE RIVER DAM	BOYNE USA INC	MOH		250	MI	BOYNE RIVER	02/22/1982	01/31/2022
3410	WOODS LAKE	WOODS LAKE RANCH	MOH	30	0	CO	LIME CREEK	02/01/1983	01/31/2003
3442	MINE FALLS	NASHUA CITY OF	MOP		3032	NH	NASHUA RIVER	08/04/1983	07/31/2023
3449	MURRAY LOCK & DAM NO. 7	NORTH LITTLE ROCK CITY OF	MOP		36800	AR	ARKANSAS RIVER	08/17/1983	07/31/2033
3450	EASTVALE	BEAVER FALLS MUNICIPAL AUTHORITY	MOP		440	PA	BEAVER RIVER	12/15/1983	11/30/2023
3452	OAK ORCHARD	NIAGARA MOHAWK POWER CORP	MOH	350		NY	OAK ORCHARD CREEK	07/15/1981	07/01/2021
3472	WYRE-WYND	SOUTHWIRE COMPANY	MOH		2745	CT	QUINEBAUG RIVER	05/19/1872	04/30/1982
3509	LITTLE FALLS	LITTLE FALLS HYDROELECTRIC ASSOC	MOH		13500	NY	MOHAWK RIVER	09/19/1983	08/31/2023
3511	GROVEVILLE	UAH GROVEVILLE HYDRO ASSOCIATES	MOH		737	NY	FISHKILL CREEK	06/04/1982	05/31/2022
3512	BRAENDLY HYDRO	GOODMAN DAVID & OLIGER GEORGE R	MOH		940	NY	FISHKILL CREEK	01/26/1984	12/31/2024
3516	HART LAKE	HART CITY OF	MOP	140	0	MI	PENTWATER RIVER	10/29/1982	09/30/2002
3562	BARKERS MILL UPPER DAM	MAINE HYDRO-ELEC DEV CORP	MOH		950	ME	LITTLE ANDROSCOGGIN RIVER	08/22/1983	07/31/2023
3603	RUEDI	ASPEN CITY OF & PITKEN COUNTY	MOP		3200	CO	FRYINGPAN RIVER	09/08/1983	08/31/2033
3706	MUSSERS DAM	AMERICAN HYDRO POWER CO	MOH	340		PA	MIDDLE CREEK	07/30/1982	06/30/2022
3777	ROLLINSFORD	ROLLINSFORD TOWN OF	MOP	1492		NH	SALMON FALLS ROVER	09/18/1981	08/31/2021
3816	SOUTHSIDE CANAL	ENERGENICS SYSTEMS INC	MOH		3950	CO	SOUTHSIDE CANAL	05/05/1983	04/30/2033
3819	MT ELBERT	ENERGENICS SYSTEMS INC	MOH		2800	CO	MT. ELBERT CONDUIT	11/18/1982	10/31/2032
3820	SOMERSWORTH	GENERAL ELECTRIC COMPANY	MOH		1500	NH	SALMON FALLS RIVER	09/29/1981	08/31/2021
3842	E.B.C. 4.6 POWER PLANT	QUINCY-COLUMBIA BASIN IRRIGAT DIST	MOP	2200		WA	ELTOPIA BRANCH CANAL	12/09/1981	12/31/2031
3843	P.E.C. 66.0 POWER PLANT	QUINCY-COLUMBIA BASIN IRRIGAT DIST	MOP		2300	WA	POTHOLES EAST CANAL	12/09/1981	12/31/2031

*	3940	LEWISVILLE DAM	DENTON CITY OF	MOP		2000	TX	TRINITY RIVER	03/27/1984	02/28/2034
*	4021	LAKE TAHOMA	SARANAC ENERGY CORPORATION	MON	240	0	NC	BUCK CREEK	07/14/1982	06/30/2022
*	4025	SHINGLE CREEK	KOYLE JOHN H	MON		110	ID	N FORK AND S FORK OF SHINGLE CREEK	09/30/1981	08/31/2031
*	4117	COLEBROOK	METROPOLITAN DIST OF HARTFORD	MOP		2500	CT	WEST BRANCH FARMINGTON RIVER	03/29/1984	02/28/2034
*	4129	RIO BRAVO	OLCESE WATER DISTRICT	MOP		7120	CA	KERN RIVER	09/20/1983	08/31/2033
*	4202	LOWELL TANNERY	PUMPKIN HILL POWER COMPANY	MON		875	ME	PASSADUMKEAG RIVER	10/31/1983	09/30/2023
*	4306	MISSISSIPPI LOCK & DAM NO. 2	HIBBING CITY OF	MOP		4000	MN	MISSISSIPPI RIVER	07/11/1983	06/30/2033
*	4316	BLUE VALLEY RANCH	TRANS MOUNTAIN HYDRO CORPORATION	MON		130	CO	BLUE RIVER	07/06/1983	06/30/2023
*	4334	PHILADELPHIA	LONG LAKE ENERGY CORP	MON		3000	NY	INDIAN RIVER	02/17/1983	01/31/2023
*	4362	RIVERDALE	INMAN MILLS	MON		1240	SC	ENOREE RIVER	09/29/1982	08/31/2012
*	4428	WALDEN	WALDEN POWER CORPORATION	MON		2824	NY	WALLKILL RIVER	06/15/1982	05/31/2022
*	4451	LOWER GREAT FALLS	SOMERSWORTH HYDROPOWER &	MON		1289	NH	SALMON FALLS RIVER	04/22/1982	04/30/2022
*	4506	BLOOMINGTON	WESTERNPORT CITY OF	MOP		13850	MD	NORTH BRANCH POTOMAC		
*	4597	PINE VIEW	WEBER-BOX ELDER CONS DIST	MOP		1000	UT	OGDEN RIVER	03/16/1984	02/28/2034
*	4639	CHRISTINE FALLS	LONG LAKE ENERGY CORP	MON		725	NY	SACANDAGA RIVER	10/18/1983	09/30/2023
*	4641	DANNER-FENSTER	DANNER GEORGE & FENSTER JAMES P	MON	12	12	AK		08/28/1981	07/31/2031
*	4718	COCHECO FALLS	WEBSTER JOHN W	MON		700	NH	COCHECO RIVER	12/08/1982	11/30/2023
*	4749	MILL CREEK	WALKER LARRY S	MON		1860	WA	POTHOLES EAST CANAL	10/05/1983	09/30/2033
*	4750	ELTOPIA BRANCH CANAL	ENERGENICS SYSTEMS INC	MON		682	WA	ELTOPIA BRANCH CANAL	09/09/1983	08/31/2033
*	4784	PREJEPSCOT	ANDROSCOGGIN WATER POWER COMPANY	MON	2500[12]	10025	ME	ANDROSCOGGIN RIVER	09/16/1982	08/31/2022
*	4796	GLEN PARK	NIAGARA MOHAWK POWER CORP	MON	0	15490	NY	BLACK RIVER	12/29/1982	11/30/2032
*	4800	MOON LAKE	BOUNTIFUL CITY OF	MOP		4725	UT	LAKE FORK RIVER	06/10/1983	05/31/2033
*	4881	BARBER DAM	ADA CO BOISE CITY OF & BLOOM A L	MON		4140	ID	BOISE RIVER	12/23/1983	11/30/2023
*	5044	SIBLEY MILL	GRANITEVILLE COMPANY	MON	2475		GA	AUGUSTA CANAL - SAVANNAH RIVER	04/15/1983	03/31/2063
*	5073	BENTON FALLS	WHITMAN EVERETTE E	MON		3400	ME	SEBASTICOOK RIVER	03/08/1984	02/28/2034
*	5089	FELT	FALL RIVER RURAL ELEC COOP INC	MON	1870[13]	6025	ID	TETON RIVER	09/0[illegible]/1983	08/31/2023
*	5124	NORTH BRANCH NO.3	WASHINGTON ELECTRIC COOPERATIVE INC	MON		1000	VT	WINOOSKI RIVER	11/2[illegible]/1982	10/30/2022
*	5227	HORSE CREEK	TIFT ROBERT RAYMOND	MON		1200	CA	HORSE CREEK	02/06/1984	01/31/2034
*	5261	NEWBURY	NEWSBURY HYDRO COMPANY	MON		334	VT	WELLS RIVER	09/08/1983	08/31/2023
*	5283	CARGILL FALLS	HALE MANUFACTURING COMPANY	MON		1360	CT	QUINEBAUG RIVER	08/29/1983	07/31/2023
*	5297	MANVILLE	FORTE BROTHERS INC	MON		1240	RI	BLACKSTONE RIVER	08/29/1983	07/31/2023
*	5312	WESTFIR	J R FERGUSON & ASSOCIATES	MON		3000	OR	N FORK MIDDLE FORK WILLAMETTE RIVER	03/03/1983	02/28/2033
*	5313	DEWEYS MILLS	HYDRO ENERGIES CORPORATION	MON		1840	VT	OTTAUQUECHEE RIVER	01/20/1983	12/31/2032

*	5334	FORD LAKE	JOINT YPSILANTI RECREATION ORGAN	MOM	1920		MI	HURON RIVER	10/07/1983	09/30/2003
*	5362	LOWER MOUSAM	KENNEBUNK LIGHT AND POWER DISTRICT	MOP	0	375	ME	MOUSAM RIVER	04/14/1982	03/31/2022
*					150	0		MOUSAM RIVER		
*					300	0		MOUSAM RIVER		
*					150	0		MOUSAM RIVER		
*	5596	BEDFORD	BEDFORD, CITY OF	MOP	1090	4800	VA	JAMES RIVER	05/20/1983	04/30/2023
*	5598	MILTON	EAST COAST ENGINEERING	MOM		600	NH	SALMON FALLS RIVER	12/30/1982	11/30/2022
*	5667	WEARE RESERVOIR	EAST COAST ENGINEERING	MOM		114	NH	PISCATAQUOG RIVER	01/20/1983	12/31/2022
*	5702	BARNET	BARNET HYDRO COMPANY	MOM		530	VT	STEVENS RIVER	08/06/1982	07/31/2032
*	5728	SANDY HOLLOW	SANDY HOLLOW HYDRO ASSOCIATES	MOM		615	NY	INDIAN RIVER	03/22/1983	02/28/2023
*	5765	MADERA CANAL MILE 24.2 (DRY CREEK)	MADERA IRRIGATION DISTRICT	MOP		275	CA	MADERA CANAL	09/08/1983	08/31/2033
*	5867	ALICE FALLS	LONG LAKE ENERGY CORP	MOM		1960	NY	AUSABLE RIVER	10/05/1983	09/30/2023
*	5891	OPAL SPRINGS	DESCHUTES VALLEY WATER DISTRICT	MOP		4900	OR	CROOKED RIVER	11/02/1982	10/31/2032
*	5986	NORTH CANAL	NORTH CANAL WATERWORKS	MOM	2520		MA	NORTH CANAL	08/11/1982	07/31/2002
*	5944	MORETOWN NO. 8	POCANTICO DEVELOPMENT ASSOC INC	MOM		800	VT	MAD RIVER	12/07/1982	11/30/2023
*	5956	LOWELL ATLANTIC	MASSACHUSETTS HYDRO ASSOCIATES	MOM	700		MA	LAWRENCE CANAL	12/30/1983	11/30/2003
*	5983	LOST CREEK	MORGAN CITY CORPORATION	MOP		600	UT	LOST CREEK	10/07/1983	09/30/2033
*	6058	HAILESBORO NO. 4	HYDRO DEVELOPMENT GROUP INC	MOM	1490		NY	OSWEGATCHIE RIVER	01/10/1983	12/31/2002
*	6059	FOWLER NO. 7	HYDRO DEVELOPMENT GROUP INC	MOM	900		NY	OSWEGATCHIE RIVER	11/29/1982	10/31/2002
*	6115	PYRITES	HYDRO DEVELOPMENT GROUP INC	MOM	1200	6000	NY	GRASS RIVER	09/23/1983	08/31/2023
*	6120	CAMP CREEK	MCDOWELL FOREST PRODUCTS INC	MOM		990	CA	CAMP CREEK	12/29/1982	11/30/2022
*	6220	TOKUL CREEK	WEYERHAEUSER CO	MOM		3500	WA	TOKUL CREEK	03/29/1984	02/28/2034
*	6228	CASCADE DAM	CASCADE CHARTER TOWNSHIP	MOP		1000	MI	THORNAPPLE RIVER	01/20/1984	12/31/2024
*	6240	WATSON DAM	WEBSTER JOHN M	MOM		182	NH	COCHECO RIVER	09/08/1983	08/31/2023
*	6418	A.J. ALLEN	BURFORD JUDITH A	MOM		10	CO	EAST BRUSH CREEK	08/10/1983	07/31/2003
*	6440	LAKEPORT	LAKEPORT HYDROELECTRIC ASSOCIATES	MOM		600	NH	WINNEPESAUKEE RIVER	09/08/1983	08/31/2023
*	6470	WINOOSKI NO. 8	WINOOSKI HYDROELECTRIC CO	MOM		550	VT	WINOOSKI RIVER	08/29/1983	07/31/2023
*	6687	RESERVOIR NO.3	EL DORADO IRRIGATION DISTRICT	MOP		950	CA	EL DORADO MAIN NO.2	07/12/1983	06/30/2033
*	6916	STRONTIA SPRINGS	DENVER CITY & COUNTY OF	MOP		950	CO	SOUTH PLATTE RIVER	01/13/1984	12/31/2024
*	6951	TALLASSEE SHOALS HYDRO	OGLETHORPE POWER CORP	MOM		1900	GA	MIDDLE OCONEE RIVER	10/24/1983	09/30/2023
*	7000	NEWTON FALLS	NEWTON FALLS PAPER MILL INC	MOM		600	NY	OSWEGATCHIE RIVER	02/28/1984	01/31/2004
*						1540		OSWEGATCHIE RIVER		
*	7281	LATERAL 6.2 HYDROELECIRIC	MADERA IRRIGATION DISTRICT	MOP		850	CA	MADERA CANAL	12/28/1983	11/30/2033

2a - Existing Capacity Being Taken Out Of Service

Question 2. Since the Commission began relicensing hydroelectric facilities, how many such facilities have been relicensed? Please identify these facilities by the factors set forth in Question 1. How many of these new licenses have been issued to the entity holding the license which expired?

Answer 2. Ninety-one of the projects licensed by the FERC have been relicensed. In the table included in the answer to Question 1, an "R" has been placed in the left margin and the project numbers have been underlined to indicate relicensed projects. New licenses for all of these projects have been issued to the entity holding the license which expired.

Question 3. How many contested relicensing procedures are presently pending before the Commission? Please identify the facilities at issue by the factors set forth in question 1, above.

Answer 3. There are currently 12 relicensing proceedings involving competing applications before the Commission. These facilities are identified below by the factors set forth in question 1. The information includes all requested factors except the average annual capacity factor, which is not available from data presently maintained by the Department of Energy.

Project Name and Number

a. owner (including whether owner is a "state" or "municipality" or other)
b. rated capacity
c. location
d. expiration date of current license
e. date of relicensing, if applicable
f. competing applicant name(s) and designated FERC project number(s).

(Note: When a license expires, the project continues to operate under automatically-issued annual licenses. See Sec. 15(a), 16 U.S.C. 808(a)).

1. Mokelumne Project No. 137

a. Pacific Gas and Electric Company (private)
b. 192,750 KW
c. North Fork Mokelumne River, CA.
d. 11/23/75
e. has not yet been relicensed
f. The City of Santa Clara, CA. (municipal) filed a competing applicatior designated as FERC Project No. 2745.

2. Olmsted Project No. 596

a. Utah Power and Light Company (private)
b. 10,300 KW
c. Provo River, Utah
d. 10/20/75
e. has not yet been relicensed
f. The City of Bountiful, Utah (municipal) and Utah Municipal Power Company (municipal) filed competing applications designated as FERC Project Nos. 4040 and 4029, respectively.

3. Rock Creek-Cresta Project No. 1962

    a. Pacific Gas and Electric Company (private)
    b. 180,900 KW
    c. North Fork Feather River, CA.
    d. 9/30/82
    e. has not yet been relicensed
    f. Sacramento Municipal Utility District, Northern California Power Agency and the Cities of Anaheim, Azusa, Banning, Colton and Riverside, CA. (municipal) filed a competing application designated as FERC Project No. 3223.

4. Weber Project No. 1744

    a. Utah Power and Light Company (private)
    b. 3,465 KW
    c. Weber River, Utah
    d. 6/30/70
    e. has not yet been relicensed
    f. The City of Bountiful, Utah (municipal) filed a competing application designated as FERC Project No. 2747.

5. Phoenix Project No. 1061

    a. Pacific Gas and Electric Company (private)
    b. 1,800 KW
    c. South Fork Stanislaus River, CA.
    d. 12/25/80
    e. has not yet been relicensed
    f. The Tuolumne County Water District (municipal) filed a competing application designated as FERC Project No. 4309.

6. Shawano Project No. 710

    a. Wisconsin Power and Light Company (private)
    b. 640 KW
    c. Wolf River, WI
    d. 7/19/77
    e. has not yet been relicensed
    f. The City of Shawano (municipal) filed a competing application designated as FERC Project No. 2865.

7. Haas-Kings River Project No. 1988

    a. Pacific Gas and Electric Company (private)
    b. 225,000 KW
    c. North Fork Kings River, CA.

   d. 3/31/85
   e. has not yet been relicensed
   f. Sacramento Municipal Utility District et al. (municipal) filed a competing application designated as FERC Project No. 6729.

8. Rush Creek Project No. 1389

   a. Southern California Edison Company (private)
   b. 8,400 KW
   c. Rush Creek, CA
   d. 11/30/86
   e. has not yet been relicensed
   f. June Lake Public Utility District (municipal) filed a competing application designated as FERC Project No. 6930.

9. Poole Project No. 1388

   a. Southern California Edison Company (private)
   b. 10,000 KW
   c. Lee Vining Creek, CA
   d. 11/30/86
   e. has not yet been relicensed
   f. City of Vernon, CA. (municipal) filed a competing application designated as FERC Project No. 7263.

10. Walters Project No. 432

   a. Carolina Power and Light Company (private)
   b. 108,000 KW
   c. Pigeon River, N.C.
   d. 11/22/76
   e. has not yet been relicensed
   f. North Carolina Electric Membership Corporation (private) filed a competing application designated as FERC Project No. 2748.

11. Kerr Project No. 5

   a. The Montana Power Company (private)
   b. 168,000 KW
   c. Flathead River, Montana
   d. 5/22/80
   e. has not yet been relicensed
   f. The Confederated Salish and Kootenai Tribes of the Flathead Reservation (private) filed a competing application designated as FERC Project No. 2776.

12. Grandfather Falls Project No. 1966

    a. Wisconsin Public Service Company (private)
    b. 17,240 KW
    c. Wisconsin River, WI.
    d. 12/31/87
    e. has not yet been relicensed
    f. The Wisconsin Public Power Inc. System (municipal) filed a competing application designated as FERC Project No. 8243.

Question 4. How many existing licenses for facilities identified in response to Question 1 are held by States or municipalities? Please identify these facilities by the factors set forth in Question 1. What standard of compensation would be applied to these facilities were an entity other than the existing licensee to receive the license?

Answer 4. States and municipalities hold 158 licenses. These licenses are identified in the table included in Answer 1. In that table, the letter "P" in the third digit of an entry under the heading labeled "LT" identifies the licensee as a State or municipality.

The provisions set forth in Section 14 (a) of the Federal Power Act require payment of the net investment of the licensee in the project or projects taken over, not to exceed the fair value of the property taken, plus severance damages, if any. Section 14 also provides that the amount of the licensee's net investment in a project or projects and the amount of severance damages, if any, are to be determined by the Commission after notice and opportunity for hearing.

Question 8. Please supply one copy of the Commission order establishing the docket and nature of proceeding in the City of Bountiful case.

Answer 8. Attached is the "Order Granting Interventions and Setting Briefing Schedule" in Docket No. EL78-43, issued May 3, 1979.

Question 8

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Georgiana Sheldon, Acting Chairman;
Matthew Holden, Jr., and George R. Hall.

City of Bountiful, Utah)
Utah Power and Light Company)
City of Santa Clara, California) Docket No. EL78-43
Pacific Gas & Electric Company)

ORDER GRANTING INTERVENTIONS AND SETTING BRIEFING SCHEDULE

(Issued May 3, 1979)

The City of Bountiful, Utah (Bountiful) and the City of Santa Clara, California (Santa Clara) have filed petitions for a declaratory order determining that the preference provided under section 7(a) of the Federal Power Act [1] (Act) for a "municipality" within the meaning of section 3(7) [2] applies against a non-public "original licensee" in a relicensing proceeding under section 15. [3] Santa Clara's petition also raises the question of whether a present licensee who holds the license as an assignee or successor in interest [4] is considered an "original licensee" under section 15. The petitions have been consolidated in a single docket and notice has been issued.

Related Motions

Clark-Cowlitz Joint Operating Agency (CCJOA) has filed an application for license in competition with an application by Pacific Power & Light Co. (PP&L) for relicensing of its Merwin Project No. 935. CCJOA has petitioned for an order declaring that it is the preferred applicant for relicensing of the Merwin Project. In addition, CCJOA has petitioned to intervene in this docket and has moved that we consolidate its petition for declaratory order with this proceeding. PP&L, on the other hand, has filed motions seeking to postpone action in Docket No. EL78-43 indefinitely, pending resolution in the relicensing proceeding, after evidentiary hearings, of whether CCJOA has a preference over PP&L. Both PP&L's and CCJOA's pleadings seek relief that would go beyond the scope of the instant proceeding.

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[1] 16 U.S.C. §800(a) (1976).

[2] 16 U.S.C. §796(7) (1976). Of course, if the preference does apply for a "municipality", it also applies for a state. See section 7(a) of the Act.

[3] 16 U.S.C. §808(a) (1976).

[4] See section 8 of the Act, 16 U.S.C. §801 (1976).

In this docket, we are faced with resolution of a purely legal issue, a question of statutory construction which in no way hinges upon the facts of a particular case. In this proceeding, we are not concerned with whether any particular applicant is a "municipality"; nor are we addressing whether any particular applicant's plans are (or within a reasonable time are made) as well adapted as another's are to "conserve and utilize in the public interest the water resources of the region." Those are the kinds of questions implicit in the pleadings of CCJOA and PP&L.

Our inquiry here is solely-- assuming a particular competing applicant on relicensing is a "municipality", and assuming its plans are or are made equally well adapted as those of a non-municipal "original licensee"--whether that municipality has a preference over that non-municipality. This is the sort of generic issue, with potential effects on a broad range of persons and proceedings, which is particularly well-suited to decision in a proceeding for a declaratory order. Even if we should decide here that the section 7(a) preference does apply against an "original licensee" in relicensing proceedings, that determination would not foreclose either CCJOA or PP&L from addressing in the proceeding for relicensing of the Merwin Project the particular circumstances of CCJOA, PP&L, and the Merwin Project, and whether CCJOA would be entitled to such a preference. Those are matters which may well involve material factual disputes between CCJOA and PP&L and which, in any event, would not aid our determination of the issue of law before us in this docket. For this reason, we will deny the motions of both CCJOA and PP&L. Each will have the opportunity to present its arguments on the legal question in this proceeding as an intervenor. In addition-- assuming for the sake of argument that we decide the section 7(a) preference applies in relicensing cases--CCJOA and PP&L may litigate in the relicensing proceeding on the Merwin Project the separate, specific question of whether CCJOA is entitled to such a preference. 5/

5/ We note also that this proceeding will not resolve whether either Bountiful or Santa Clara would be entitled to a section 7(a) preference, if there is one. Those issues must be resolved in the two separate relicensing proceedings in which they are respectively parties.

Interventions

In addition to CCJOA and PP&L, the following entities have petitioned to intervene in this proceeding: the American Public Power Association, Carolina Power & Light Co., Georgia Power Co., the "Hydroelectric Utility Company Group" (an informal collection of 31 investor-owned electric utility companies that are licensees or hold interests in licensees), the International Brotherhood of Electrical Workers, The Montana Power Co., Pacific Gas & Electric Co., Utah Power & Light Co., and Wisconsin Power & Light Co. 6/ The California Public Utilities Commission filed a notice of intervention. All have shown adequate reasons to be permitted to intervene.

Briefing and Schedules

The primary issue in this proceeding is whether the section 7(a) preference for states and municipalities applies against a non-public "original licensee" in a relicensing proceeding. The secondary issue is whether a licensee holding its license as an assignee or successor in interest of an earlier licensee constitutes an "original licensee" under section 15. These questions are solely matters of law, not fact, and thus do not require an evidentiary hearing. Accordingly, the issues will be resolved after receiving briefs from the parties. We will allow 60 days for initial briefs. (Parties who have already filed their legal arguments need not refile.) Reply briefs will be due 30 days later.

The Commission orders:

(A) The following entities are permitted to intervene in this proceeding, subject to the Commission's rules and regulations under the Federal Power Act: the American Public Power Association; the California Public Utilities Commission; Carolina Power & Light Co., Clark-Cowlitz Joint Operating Agency; Georgia Power Co.; the Hydroelectric Utility Company Group; the International Brotherhood of Electrical Workers; The Montana Power Co.; Pacific Gas & Electric Co.; Pacific Power & Light Co.; Utah Power & Light Co.; and Wisconsin Power & Light Co.

6/ Although Santa Clara also has petitioned to intervene, it is already a party, since it filed one of the petitions that initiated this proceeding.

Participation of the intervenors shall be limited to matters affecting asserted rights and interests specifically set forth in their petitions to intervene. The admission of the intervenors shall not be construed as recognition by the Commission that they might be aggrieved by any order entered in this proceeding.

(B) The parties to this proceeding and Commission staff counsel may file initial briefs no later than 60 days from the date of this order, and reply briefs no later than 30 days from the last day for filing initial briefs, addressing these issues:

(1) Does the preference provided in section 7(a) of the Act for a state or a municipality apply in a relicensing proceeding under section 15 of the Act against an original licensee that is neither a state nor a municipality?

(2) Is a licensee which holds the original license for a project as an assignee or a successor under section 8 of the Act an "original licensee" within the meaning of section 15 of the Act?

(C) The motion filed by Clark-Cowlitz Joint Operating Agency to consolidate with this proceeding the question of whether it has a preference over Pacific Power & Light Co. for relicensing of the Merwin Project is denied. The motion of Pacific Power & Light Co. to postpone action in this proceeding is denied.

By the Commission.

(S E A L)

Lois D. Cashell,
Acting Secretary.

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D. C. 20426
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Question 9. Section 7(a) of the Federal Power Act and H.R. 5299 contain provisions that permit state or municipal applicants a "right to cure" their applications to make them "equally well adapted" to meet the public interest. Please describe how the Commission presently accords this "right to cure" under Section 7(a), including a description of the time within which the "right" exists and whether the Commission gives timely notice to the state or municipal applicant regarding what such applicant must do in order to make an application filed by such an entity "equally well adapted."

Answer 9. Section 7(a) of the Federal Power Act ("Act"), 16 U.S.C. § 800(a), provides that the Commission shall in certain circumstances give preference to applications by states and municipalities, provided their plans are deemed by the Commission equally well adapted, "or shall within a reasonable time to be fixed by the Commission, be made equally well adapted," to conserve and utilize in the public interest the water resources of the region. The Commission has ruled that this provision of Section 7(a) of the Act does not apply in cases of competition against an existing licensee for a new license. Pacific Power & Light Co., et al., 25 FERC ¶61,052 (1983) ("Merwin"). (The term "new license" refers to a license issued after the expiration of an outstanding license.) H.R. 4402 (Shelby bill) would confirm the Commission's ruling and amend Section 7(a) in that regard by removing the reference to relicensing under Section 15 of the Act. On the other hand, H.R. 5299 (Ottinger bill) would grant a preference to state and municipal relicensing applications if their plans are equally well adapted or will, within a reasonable time to be fixed by the Commission, be made equally well adapted to serve the public interest. H.R. 5416 (Gore bill) would extend to cooperatives and associations of cooperatives whatever treatment Section 7(a) accords to states and municipalities, but would not otherwise amend Section 7(a) of the Act or affect the Commission's interpretation of that section in Merwin.

The Commission concluded in the Merwin case that a state's or municipality's right to make the plans in its preliminary permit or original license application equally well adapted must be exercised before the Commission passes judgment on the competing plans. Once judgment has been passed, the state or municipality only has an opportunity to cure those deficiencies which can be remedied through the imposition of license conditions. 25 FERC ¶61,052 at 61,191.

In Merwin, the Commission also set forth its interpretation of what minimum opportunity the law requires to be given to states and municipalities to cure the plans in their preliminary permit or original license application or in their new (non-original) license application, if the existing licensee is not competing in the relicensing proceeding. The Commission's regulations currently provide states and municipalities an additional opportunity to match non-municipal competitors' applications for preliminary permit and original license. 18 C.F.R. § 4.33(g)(4) provides that in such cases "the Commission will inform the municipality or state of the specific reasons why its plans are not as well adapted and afford a reasonable period of time for the municipality or state to render its plans at least as well adapted... ." As was noted in Merwin, "[p]lans associated with proposed hydroelectric development involve infinitely more possibilities than plans associated with existing development wherein adversary applicants propose to continue to operate and maintain the same project works." 25 FERC ¶61,052 at 61,221-22. For the purposes of preliminary permit competition, the Commission has interpreted "a reasonable period of time" to be 30 days. On the date it decides that the non-municipal plan is superior, the Commission sends the state or municipality a letter stating the specific reason for its finding and giving the state or municipality 30 days to match the superior plan. Arkansas Valley Electric Cooperative, et al., 13 FERC ¶61,048 (1980) and 13 FERC ¶61,171 (1980).

Question 10. Please explain how the Commission reviews plans filed by applicants in relicensing cases under the requirements of sections 7(a) and 10(a) of the Federal Power Act in both contested as well as uncontested cases. By what environmental, utilization and development standards does the Commission decide, in contested cases, whether one plan or another is "best adapted" to serve the public interest? Please explain in detail how the Commission considers impact on the environment of any plan filed in a relicensing case, including uncontested cases.

Answer 10. Uncontested relicense applications are reviewed with respect to environmental impacts, safety, and water resource utilization to determine if continued operation of these projects would be in the best public interest. The review consists of: (1) an assessment of the impacts of past and proposed operation and mitigative proposals in consideration of agency comments; (2) an evaluation of the design of the project structures for safety and adequacy determinations; (3) an assessment of the physical condition of the project works with regard to suitability for continued operation; (4) an assessment of the effectiveness of recreation and public access safety features; (5) a determination of optimal power installation and operation; (6) an evaluation of reservoir operation with respect to power production, recreation, fish and wildlife, water supply, flood control, and other beneficial purposes; (7) a reappraisal of minimum flow requirements, fish protection measures, and fish passage facilities; and (8) a determination of whether Federal takeover should be recommended.

In contested relicensing cases, the competing applications are reviewed as above but with some additional considerations. The applicants' plans are compared on the basis of: (1) their expected environmental impacts; (2) proposals to mitigate adverse project impacts; (3) proposals to enhance environmental resources; and (4) differences in installation and operation for power production. A determination is also made of the cost to the original licensee of obtaining an equivalent amount of power from an alternative source if it were to lose the project. The relative cost of the project to each applicant's consumers is also assessed.

Question 11. Does section 10(a) of the Federal Power Act contain substantive standards by which plans filed in relicensing cases under section 7(a) are reviewed to determine whether they are "best adapted" to serve the public interest? If so, are these standards different from those applied by the Commission under section 7(a) or additive to them? Please explain how the Commission applies section 10(a) in contested and uncontested relicensing cases.

Answer 11. Section 10(a) sets forth a set of standards to be met for all licenses issued under Part I of the Federal Power Act, while section 7(a) sets forth the standard for selecting a licensee when plans are competing. The section 10(a) standard, best adapted to a comprehensive plan for improving or developing a waterway, is the standard applied under Section 7(a). Pacific Power & Light Co., et al., 25 FERC ¶61,052 at 61,187 (1983).

The Commission's application of section 10(a) for both contested and uncontested cases is based upon a review of the entire record before it, and its decision must be supported by substantial evidence. The Commission's procedures provide for the development of a record in each case which includes consideration of all aspects of beneficial public uses of a waterway or waterways involved.

First, potential applicants are required by the Commission's regulations to assemble supporting data and to perform necessary studies concerning engineering, economic, environmental, and other matters in support of their application. 18 C.F.R. Part 4. Consultation by these potential applicants with appropriate Federal, state, and local agencies is required in conducting studies and collecting data to prepare an acceptable application.

Once an application is filed, the Commission's staff reviews it for completeness and acceptability. When the application is accepted, the Commission requests comments from interested Federal, state, and local agencies, and issues a public notice. This notice provides the public with an opportunity to file protests, motions to intervene, and comments. The notice is published in the Federal Register and in newspapers in the vicinity of the project.

The Commission's staff then conducts its independent review and analysis, and provides the Commission with a record in sufficient detail for it to decide whether the proposed project is best adapted to a comprehensive plan for improving or developing a waterway.

When material facts are in dispute, the Commission may order an evidentiary hearing following the staff's review and analysis of issues raised in the application, agency or public comments, protests or motions to intervene.

Question 12. Please set forth the Commission's understanding of how H.R. 4402 would change the law relating to relicensing cases, and the manner in which the Commission handles these cases.

Answer 12. The Commission now handles relicensing cases in the following way. The Commission issues a public notice of projects under expiring licenses five years in advance of their expiration. (See 18 C.F.R. § 16.2.) Any applicant may compete for the new license. When acceptable applications for new license are filed, either by the existing licensee or by competitors, the Commission gives public notice; requests comments from interested Federal, state, or local agencies; and invites comments, protests, or motions to intervene from interested entities. (See 18 C.F.R. § 4.31(c).) The Commission staff conducts its own independent review and analysis, using available information and developing additional information that may be needed for a sufficient record. If neither the Commission nor any other Federal department or agency recommends takeover by the United States, and the Commission does not decide to issue a license for nonpower use, the Commission then decides whether to issue a new license to the existing licensee or to a competitor, if there is one, using the standards of Sections 7(a) and 10(a) of the Federal Power Act, 16 U.S.C. §§ 800(a) and 803(a), respectively.

H.R. 4402 (Shelby bill) addresses the relicensing provisions of the Federal Power Act. Section 2 of H.R. 4402 would amend Section 7(a) of the Act, 16 U.S.C. § 800(a), to provide that the municipal preference provision of that Section applies only to issuance of preliminary permits and original licenses, and not to new licenses issued on relicensing under Section 15(a) of the Act, § 808(a). (The term "new licenses" refers to licenses issued after the expiration of an outstanding license.) Section 3 of H.R. 4402 would amend Section 15(a) of the Act to clarify the process for the issuance of new licenses on the expiration of existing licenses. Basically, the amended Section 15(a) would provide that if the United States does not take over a project upon expiration of the existing license, the Commission shall issue a new license to the existing licensee unless the Commission determines that the project to be relicensed, as applied for, would not meet the standards prescribed in Section 10(a) of the Act, taking into account public benefits provided during the preceding license term. Section 3 would also address the matter of compensation to be paid to the existing licensee if a project should be licensed to a new licensee. The standard would be "just compensation" in an amount determined by the Commission "in accordance with due process of law."

In contrast to H.R. 4402, the other two bills, H.R. 5299 and H.R. 5416, propose a different approach. H.R. 5299 (Ottinger bill) would give a preference to states and municipalities in relicensing if their plans are, or within a reasonable time are made, equally well adapted as those of other competing applicants to serve the public interest. H.R. 5299 provides that in determining which plans are best adapted to serve the public interest, the Commission would consider (a) the plans of the applicants to develop, conserve, and utilize the water resources of the region, including plans for protection and enhancement of fish, wildlife, natural, cultural and recreational resources; (b) the economic impact of the issuance of a license to each of the competing applicants, including economic impact on ratepayers of each electric utility applicant; and (c) the electricity consumption efficiency improvement programs of each of the competing applicants, including past performance and future plans respecting such improvements. Additionally, H.R. 5299 would provide that an applicant for a new license, other than the existing licensee, may agree to pay to the existing licensee which is an electric utility applicant an amount greater than the amount specified in Section 14(a) of the Act, 16 U.S.C. § 807(a), which basically provides for payment of net investment, not to exceed fair value, plus severance damages. However, no specific standard or methodology for determining the amount of compensation is prescribed. The bill would also direct the Commission to consider the larger payment in determining the economic impact on the ratepayers of an electric utility applicant.

H.R. 5416 (Gore bill) includes a statement of findings and purposes with respect to promoting competition in the electric utility industry. The bill would make various changes in the Act to include rural electrical cooperatives or associations of cooperatives within the preference given by Section 7(a) of the Act, 16 U.S.C. § 800(a), to states and municipalities in the issuance of preliminary permits and original licenses. Under the Commission's decision in Pacific Power & Light Co., et al., 25 FERC ¶61,052 (1983) ("Merwin"), the preference of Section 7(a) in favor of states and municipalities is inapplicable to relicensing proceedings in which licensees in possession of the project works are applicants (25 FERC ¶61,052 at p. 61,207).

H.R. 5416 also contains new provisions for antitrust review in relicensing proceedings by adding a new Section 15A to the Act. Under this amendment, the Commission would furnish to the Attorney General a copy of each application for a new license together with appropriate information, receive antitrust advice from the Attorney General, and hold hearings on request — all for the purpose of the Commission's conducting a broad inquiry and making a finding as to whether activities under the license would create or maintain a situation inconsistent with specified antitrust laws. The bill would also prescribe various procedures, including waiting periods, depending on the findings made by the Commission. Perhaps the most noteworthy of these procedures is the mandatory rejection under Section 4(d)(2) of any competing application for which an affirmative finding of a situation inconsistent with the antitrust laws is made, providing that there is a negative finding for at least one of the competing applications.

Question 12.a. Would the Commission still apply Section 7(a) standards in the review of competing plans?

Answer 12.a. Section 7(a) of the Federal Power Act, 16 U.S.C. § 800(a), provides:

> [i]n issuing preliminary permits hereunder or licenses where no preliminary permit has been issued and in issuing licenses to new licensees under section 15 hereof the Commission shall give preference to applications therefor by States and municipalities, provided the plans for the same are deemed by the Commission equally well adapted, or shall within a reasonable time to be fixed by the Commission be made equally well adapted, to conserve and utilize in the public interest the water resources of the region; and as between other applicants, the Commission may give preference to the applicant the plans of which it finds and determines are best adapted to develop, conserve, and utilize in the public interest the water resources of the region, if it be satisfied as to the ability of the applicant to carry out such plans.

The Commission has held that the municipal preference in Section 7(a) does not apply in cases of competition against an existing licensee for a new license. Pacific Power & Light Co., et al., 25 FERC ¶61,052 (1983) ("Merwin"). (The term "new license" refers to a license issued after the expiration of an outstanding license.) H.R. 4402 (Shelby bill) would amend Section 7(a) of the Act to confirm this holding. H.R. 5299 (Ottinger bill) would amend Section 7(a) to provide for preference to states and municipalities when their competing plans in relicensing proceedings are or will be made equally well adapted to serve the public interest. H.R. 5416 (Gore bill) would amend Section 7(a) to include cooperatives or associations of cooperatives in any preference accorded to states and municipalities.

Different results are obtained among the bills with respect to relicensing proceedings wherein the existing licensee is not a competitor for a new license. H.R. 5416 would not amend Section 7(a) except to extend to cooperatives and associations of cooperatives whatever treatment the subsection accords to states and municipalities. Therefore, it would not revise the Commission's ruling in the Merwin case that the municipal preference clause of Section 7(a) applies to competition for a new license where the existing licensee is not an applicant. 25 FERC ¶61,052 at 61,179. H.R. 4402 would amend Section 7(a) by limiting it to competition for original licenses. H.R. 5299 would provide a municipal preference in a new subsection 7(d)(3).

Question 12.b. Does the bill resolve the legal issue raised in the appeal of the Merwin Dam case (Clark-Cowlitz Joint Operating Agency v. FERC) regarding the breadth of review of competing plans by the Commission?

Answer 12.b. In its decision in the Merwin case, the Commission found that under Sections 7(a) and 10(a) of the Federal Power Act, 16 U.S.C. §§ 800(a), 803(a), the "selections of (a) the licensee, and (b) the best adapted comprehensive plan, are to be based on the same public interest standard....Accordingly, the expressed scope of the Section 7(a) public interest inquiry is subsumed within the broader scope of the Section 10(a) public interest inquiry." Pacific Power & Light Co., et al., 25 FERC ¶61,052 at p. 61,187 (1983) (emphasis omitted). H.R. 4402 (Shelby bill) would provide for a Section 10(a) standard in issuing new licenses to existing licensees, but would also require the Commission to take into account public benefits provided during the preceding license term.

H.R. 4402 appears to apply prospectively from enactment; it would therefore not affect the Merwin appeal. With respect to the applicability of the municipal preference against existing licensees in relicensing cases arising after enactment, H.R. 4402 should resolve that question, as should H.R. 5299 (Ottinger bill) (see Answers 9., 12.a.). H.R. 5416 (Gore bill) does not address the point; rather, it amends Section 7(a) of the Act so as to extend to cooperatives and associations of cooperatives whatever treatment the subsection accords to states and municipalities (see Answer 12.).

Question 12.c. If two competing plans filed by applicants were deemed to be "equally well adapted," how would the Commission decide to whom to issue the new license?

Answer 12.c. If an existing licensee's plans meet the standards of H.R. 4402 (Shelby bill) for issuance of a new license, then it appears that the new license will be issued to that licensee if there is no takeover by the United States. If the competition for new license is between applicants, neither of which is the existing licensee, there is no Federal takeover, and the applicants' plans are equally well adapted under standards for a new license, then it appears that the basis for selection under H.R. 4402 is left to the Commission's discretion.

Under H.R. 5299 (Ottinger bill), a different result would occur. If in competition for a new license two competing plans filed by applicants were deemed "equally well adapted," and one of the applicants is a state or municipality, then the state or municipality would have a preference if there is no takeover by the United States. However, if competing plans are deemed "equally well adapted," and none of the competing applicants or all of the competing applicants with equally well adapted plans are states or municipalities, then it appears the basis for selection under H.R. 5299 is left to the Commission's discretion.

H.R. 5416 (Gore bill) would amend Section 7(a) of the Federal Power Act, 16 U.S.C. § 800(a), to extend its application to cooperatives and associations of cooperatives. (see Answers 9. and 12.a.). The Commission has held that the municipal preference provision of Section 7(a) is inapplicable to relicensing proceedings in which licensees in possession of the project works are applicants (see Answer 12.a.); it thus appears that if competing plans are deemed "equally well adapted," there would be no Section 7(a) preference if one of the applicants is the existing licensee, and thus the basis for selection under H.R. 5416 is left to the Commission's discretion if there is no takeover by the United States. If the existing licensee is not one of the applicants, and one of the competing applicants is a state, municipality, cooperative, or association of cooperatives, then that state, municipality, cooperative, or association of cooperatives would have a preference; however, if two of the competing applicants are a state, municipality, cooperative, or association of cooperatives, the choice between such applicants is left to the discretion of the Commission.

Question 12.d. How would the Commission determine the amount of compensation established under H.R. 4402 in any individual case?

Answer 12.d. Currently there are provisions in the Federal Power Act that relate to eminent domain proceedings (See Sections 14 and 21, 16 U.S.C. § 807 and 814, respectively). The proviso at the end of Section 14(a) specifically refers to payment of just compensation. However, it has been traditionally a function of the courts rather than the Commission to determine just compensation in such cases. If H.R. 4402 (Shelby bill) is enacted in its present form and a Commission determination of just compensation becomes necessary, the Commission will need to decide how to proceed.

H.R. 5416 (Gore bill) would not modifiy the existing provision in Sections 14(a) and 15(a) of the Act, 16 U.S.C. §§ 807(a) and 808(a), respectively, with regard to the amount of compensation to be paid to the existing licensee if a project should be relicensed to a new licensee. H.R. 5299 (Ottinger bill) would modify Section 15(a) to provide that an applicant may agree to pay to the existing licensee which is an electric utility applicant an amount greater than the amount specified in Section 14 (a) of the Act (See 16 U.S.C. § 807(a)).

OFFICIAL COMMITTEE FILE

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

July 16, 1985

JUL 16 1985

Honorable James A. McClure
Chairman, Committee on Energy
and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

In response to your request that the Commission study and report on S. 1219, the Fair Competition in Hydroelectric Licensing Act of 1985, and S. 1260, the Hydroelectric Relicensing Reform Act of 1985, I am submitting the enclosed staff analyses of these bills. These comments do not necessarily represent the views of the Commission as a whole or any Commissioner.

If I can be of further assistance in this or any other Commission matter, please let me know.

Sincerely,

Raymond J. O'Connor

Raymond J. O'Connor
Chairman

Enclosures

Enclosure 1

Analysis of S. 1219, "Fair Competition in Hydroelectric Licensing Act of 1985"

S. 1219 would amend Sections 7(a) and 15(a) of the Federal Power Act (FPA), 16 U.S.C. §§ 800(a), 808(a), to specifically require that under Section 7(a) preference be given to applications by states and municipalities (hereinafter "municipalities") in relicensing competition regardless of whether the original licensee is competing for the new license. Thus, to the extent that a municipality's plans are deemed equally as well adapted to serve the public interest as those of any other non-municipal competitors, the Commission would be required to issue a new license to that municipal applicant. S. 1219 would, however, eliminate the current statutory right granted to municipal competitors to amend their plans to make them equally as well adapted as those of a non-municipal competitor. A municipality's right to amend a relicense application at any time in the proceeding would thus be governed by the same procedural rules that apply to all competing relicense applications.

S. 1219 would not alter the current statutory basis for compensating an original licensee in the event a new license is issued to a new licensee. Compensation would be based on net investment plus severance damages as set forth in Section 14 of the FPA, 16 U.S.C. § 807(a). The proposed legislation would augment this compensation by revising Section 15(a) of the FPA to require the new licensee to provide the previous licensee up to 25 percent of the relicensed project's output for one fifth of the new license term. Such power would be provided at the new licensee's cost of power and energy from the project. It is not clear what determines the percentage of output to be provided or how the cost of power and energy provided an existing licensee are to be calculated. Such power costs could be calculated on the basis of the cost of acquisition (net investment plus severance damages) of the project by the new licensee plus operation and maintenance costs, administrative costs and annual charges. Inasmuch as S. 1219 retains the net investment-based compensation, power costs should be substantially less than avoided energy costs.

Proposed new Section 15(a) requires that the sale of project output to the previous licensee not adversely affect the status of any bonds, notes or obligations of the new licensee. To the extent that providing relatively inexpensive power to the previous licensee would "adversely affect" such obligations, it is not clear whether the provision for output sales would not apply, or whether the cost of power would have to be increased to a level that would not affect the status of these obligations.

If the new licensee is a municipal utility, this sale to the previous licensee would not be within the Commission's ratemaking authority, since a municipal utility is not a "public utility" as defined under Section 201 of the FPA.

S. 1219 contains a number of provisions that would enhance the ability of any non-licensee to compete for a new license:

(1) Proposed Section 7(d)(3) would require existing licensees to make available to entities planning to file a competing application for new license "all plans, drawings, designs, data, and any other information relating to the construction and operation of the project necessary to enable such applicant to file a competing application . . ." The licensee would be entitled to the reasonable costs of providing such information. Competitors would also be guaranteed access to project works and lands upon reasonable advance notice.

There is currently no provision in the Commission regulations that would require existing licensees, in advance of filing an application for a new license, to share data, designs, studies and other information necessary to file a competing application for a new license. Once an application is filed, it becomes public information and available to competing applicants. Further information supporting the filed application may be obtained through petitioning for discovery under the Commission's general procedural rules. 18 C.F.R. Part 385. The Commission in Pacific Gas and Electric Company, Project No. 173, City of Santa Clara, California, Project No. 2745, 56 FPC 1049 (1976), ordered an existing licensee to disclose historical information regarding the operation of its project to a competing applicant for a new license, but declined to require disclosure of certain studies that were considered the licensee's work product. In denying disclosure, the Commission noted that granting discovery of those studies would in effect compel the existing licensee to underwrite the efforts of its competitor.

(2) Proposed Section 7(d)(4) would require licensees to agree to perform joint studies with other competing applicants willing to share in the costs, provided that (1) such studies would otherwise be duplicative of studies to be performed by the existing licensee, and (2) the relevant government agency that recommends or reviews such studies approves the joint study plan.

It appears that the proposed legislation would vest in the Commission the authority to resolve any dispute whether a separate study would be duplicative and any dispute regarding respective roles and responsibilities in carrying out any joint study. Two questions arise with respect to this provision. First, a licensee may not know, at the time it engages in such studies, who its competitors will be, and therefore joint studies may be unfeasible. Also, if the competitors would have access to such studies at mere duplication costs under proposed Section 7(d)(3), it is not clear what incentive they would have to engage in joint studies at shared cost.

(3) Section 15 of the FPA would be amended to provide that the Commission shall not, in evaluating competing relicense applications, consider whether an applicant has adequate transmission facilities.

This provision would limit the Commission's ability to consider such factors as the effect on ratepayers of additional costs incurred to obtain such transmission and the effect of transmission-related difficulties on the efficient operation of the project. Such a restriction would hamper the Commission's ability to assure that the broad public interest is served.

(4) To complement the above provision, proposed Section 7(g) would require the Commission to order existing licensees to provide the new licensee transmission services over its facilities and to increase transmission capacity of any bulk transmission facility when necessary to permit transmission of the output of the project. Proposed Section 7(f) would require that all new licenses issued under Section 15 be conditioned to require any "electric utility licensee" to provide transmission services and increase bulk power transmission facilities if "necessary or appropriate in order to conserve energy, promote the efficient use of the bulk power supply market, or is otherwise in the public interest." It should be noted that the transmission rate authority of the Commission under Section 205 of the FPA relates only to public utilities, which excludes municipal licensees. Since proposed Section 7(f) refers to "any electric utility licensee," it could arguably expand the Commission's current jurisdiction.

Proposed Sections 7(f) and 7(g) would substantially expand the Commission's current authority to order wheeling. The proposed standards to order wheeling amend the existing standards in

Sections 211 and 212 of the FPA. For example, Section 211(c)(1) provides that the Commission shall not order mandatory transmission "unless the Commission determines that such order would reasonably preserve existing competitive relationships" (emphasis added). Proposed Section 7(f) would alter this finding to merely require a determination that the order would "increase competition in the bulk power supply market" (emphasis added). Section 211(a)(2)(B) currently authorizes the Commission to order wheeling that would, *inter alia*, "significantly promote the efficient use of facilities and resources" (emphasis added). Proposed Section 7(f) would delete the word "significantly" and thereby reduce the threshold showing required. Similarly, current Section 211(a)(1) authorizes wheeling that the Commission finds "is in the public interest" and meets a variety of other standards set forth therein. Proposed Section 7(f) would add "is otherwise in the public interest" as an independent basis for ordering wheeling. Additionally, Section 212 of the FPA provides a number of constraints on the Commission's current authority to order mandatory transmission service that are not incorporated in proposed Sections 7(f) and 7(g).

S. 1219 retains Section 10(a) of the FPA, 16 U.S.C. § 803(a), as the standard for judging the merits of competing applications. However, the bill specifically designates two criteria for the standard. First, clause (A), in part, paraphrases the current Section 10(a) standard and specifically adds to it the ability of "each applicant to achieve efficiency in the production and consumption of electric power . . . ." Although the ability of an applicant to operate a project is clearly a factor under the current Section 10(a) standard, the Commission has not had occasion to address the extent to which "efficiency in production and consumption of electric power" could be considered. A licensee's ability to promote and comply with Federal and state energy policies, including conservation, would be a factor to consider and weigh with other public interest factors. To the extent, however, that this provision would require an exhaustive examination of past or future compliance with regulatory requirements handled at the Federal, state, or local level, it would be inappropriate, would encumber the progress of the proceeding, and could obscure the proper scope of the Federal concerns in relicensing.

Clause (B) would require consideration of adverse impacts on fish, wildlife, natural, cultural and recreational resources, mitigation of any such impacts, and public use and benefit to be derived from such resources. All of these factors are currently considered by the Commission under Section 10(a).

To the extent such specific criteria may conflict or create ambiguities with the broad public interest criteria in Section 10(a), the Commission's relicensing decisions may be embroiled in confusion and litigation. For the most part, these criteria are encompassed under the current Section 10(a) standard. Therefore, the Commission's current scope of comparison of competing applications under Section 10(a) might not be measurably altered. However, if the law is amended to specify only some elements of the public interest that are potentially affected in relicensing, while omitting others, it is unclear what weight should be ascribed to any item in the context of a balanced relicensing decision. For example, do the specified public interest factors take on more importance than other factors usually considered under the Section 10(a) standard? Under the current Section 10(a) mandate, the Commission has the discretion to attribute appropriate weight to any one public interest factor in light of the circumstances of the particular case before it.

S. 1219 would revise current procedures for considering the potential anti-competitive effects of applications for new license. Pursuant to Section 10(h) of the FPA, 16 U.S.C. § 803(h), in all licensing proceedings the Commission must prohibit arrangements to restrain trade, fix prices or otherwise violate Federal antitrust laws. Prior to issuing a license, the Commission conducts a review of antitrust considerations that relate to the operation of the hydroelectric facility, and imposes conditions where needed to avoid antitrust violations. The proposed new Section 15(c) of the Federal Power Act does not appear to alter this obligation or the scope of the Commission's review. However, the language of the provision, "that the activities under such license would tend to create or maintain a situation inconsistent with the antitrust laws" (emphasis added), raises questions whether a lesser standard is intended than that provided in Section 10(h) of the Federal Power Act. It would also alter the procedures on relicensing by requiring that all applications for new licenses be submitted to the Attorney General for advice regarding potential antitrust implications. The Commission would then be required to consider such advice in issuing and conditioning a new license. This procedure appears unnecessary and duplicative since such a review is currently conducted by the Commission as required under Sections 10(h) and 10(a).

S. 1219 would add new Section 15(c) to require that the Commission issue any new license no later than 12 months prior to the expiration date of the existing license. This new subsection would conflict with the Commission's authority under Section 15(a) to issue annual licenses upon the expiration of an original license. This requirement would also seriously jeopardize the Commission's ability to conduct proceedings appropriate to the circumstances of each specific project.

On a matter not related to the relicensing of hydropower projects, S. 1219 would repeal Section 405(d) of the Public Utility Regulatory Policies Act (PURPA) and thus limit exemptions from licensing to the narrow category of projects that qualify as conduit hydroelectric facilities subject to exemption under Section 213 of PURPA. 16 U.S.C. § 823(a). It appears that this repeal would have no effect on exemptions that are final for purposes of administrative action. However, without the inclusion of a savings clause or without express reserved authority it is unclear to what extent, if any, the Commission would retain authority over issued exemptions. Without such authority, the Commission would be unable to enforce the standard terms and conditions set forth in 18 C.F.R. § 4.106 or to amend exemptions to accommodate future changes in circumstances.

Another amendment to PURPA proposed by S. 1219 provides that the provisions of Section 210 that grant special status to cogenerators and small power producers would not apply to projects that utilize new dams or diversions. Only qualified dams on which construction had begun prior to passage of the bill would be entitled to "qualifying status."

Enclosure 2

Analysis of S. 1260, "Hydroelectric Relicensing Reform Act of 1985"

S. 1260 proposes to amend Sections 7, 14 and 15 of the Federal Power Act (FPA) to provide for municipal preference on relicensing when the competing plans are deemed equally well adapted. When municipal preference cannot operate, i.e., if all or none of the competitors are states or municipalities, the existing licensee would be preferred in the event of a tie. In all other situations, the applicant with the plans deemed best adapted to serve the public interest would be granted the license.

S. 1260 would eliminate the Section 10(a) comprehensive development standard as the basis for judging relicense applications. Instead, S. 1260 creates a separate public interest standard in proposed Section 15(c)(3) that requires the Commission to consider: (a) the economic impact on the existing licensee's customers; (b) any impairment from loss of the project that might result in the existing licensee's ability to meet its load requirements; (c) fish and wildlife impacts; and (d) energy efficiency programs of the competitors. This listing of specific criteria to be considered in an evaluation of the suitability of an applicant's plans under the public interest standard raises interpretive questions for the Commission. The current standard used in licensing and relicensing determinations is a broad public interest standard that encompasses each of the criteria listed in the bill in addition to many others. To the extent the public interest standard adopted by S. 1260 requires consideration of all factors in the public interest, as does the current standard, a question is created as to the weight that should be ascribed to any item in the context of a balanced relicensing decision. It is unclear whether the specific criteria listed are more important than other public interest factors usually considered.

In addition to the above-listed items, S. 1260 directs that the Commission consider how the competing plans are adapted to any state-developed comprehensive plan (or in the Northwest, a Pacific Northwest Electric Power and Conservation Planning Council-developed plan) or, if there is no plan, the recommendations of state and Federal agencies and Indian tribes exercising administration over resources and public purposes at the project. The Commission's independent comprehensive development responsibilities under Section 10(a) of the FPA are thus eliminated on relicensing.

The broad mandate of Section 10(a) requires the Commission to consider all issues relevant to the public interest, including state-wide or regional concerns. Under this standard, regional and state comprehensive plans may be considered by the Commission in making its licensing decision. Such plans are evaluated and weighed in conjunction with other factors affecting the public interest to ensure that the Commission reaches a balanced independent decision with respect to the public interest. Therefore, substitution of state or regional comprehensive plans for the Commission's current Section 10(a) comprehensive development authority would narrow the current scope of evaluation at relicensing.

In those instances where a state-developed comprehensive plan does not exist, S. 1260 does not address how conflicts among the recommendations of state and Federal agencies and Indian tribes are to be resolved. Currently under Section 10(a), the Commission serves as the final arbiter of what constitutes comprehensive development except to the extent that a Federal agency may exercise its independent authority with respect to Federal reservations under Section 4(e) of the FPA.

Procedurally, S. 1260 would regulate the amendment of applications to ensure all competitors equal opportunities to upgrade their applications. This would eliminate the opportunity municipalities currently have under Section 7(a) to amend their relicensing applications to equal their competitors' plans. Under S. 1260 existing licensees must give notice three years in advance of expiration of the license of their intent to file applications and are given six months thereafter to file. Competitors must file within six months thereafter. All competitors then have a right (no later than one year prior to license expiration) to amend their proposals to improve upon the applications previously filed.

In the event a new licensee is selected to take over a licensed project, S. 1260 retains the statutory net investment basis for compensating an original licensee. Proposed Section 15(d)(4) would, however, require the new licensee also to pay 50 percent of the additional cost incurred by the original licensee to obtain alternative power for the term of the license. Any such payments must be passed directly to the customers of the existing licensee.

Proposed Section 15(c)(2) directs that new licenses shall be issued for a period not to exceed 30 years, unless the Commission determines a longer license term is necessary to best serve the public interest. Although S. 1260 does not indicate a maximum license term on relicensing, the 50-year maximum imposed by Section 6 of the FPA on all licenses issued under Part I would continue to govern new licenses issued under Section 15 as amended by S. 1260.

The provisions of S. 1260 would not apply to any application for new license pending before the Commission as of the date of enactment of the Act for a license for a project for which an existing license expires prior to January 1, 1989. A determination of the projects or applicants to which the bill, if enacted, would apply cannot be made with certainty. During the period before enactment of the bill, licensing decisions may be made for projects on which applications are currently pending; and new applications may be filed for licenses that are pending, but not yet decided when the bill is enacted, or subsequent to enactment for licenses expiring prior to 1989. The attached lists, however, itemize projects for which license terms expire prior to 1989 and projects for which competing applications have been filed.

LICENSES EXPIRING PRIOR TO 1989

LIC-EXP-DT	PROJ-NAME	ST	DEV-STREAM-NAME	DEV-CAP-INST	DEV-CAP-PROP	DEV-NO	PROJ-NO
***							
06/30/1970	WEBER	UT	WEBER	3965		174401	1744
12/13/1973	WELLS RURAL	NV	TROUT CR	0		84801	848
06/02/1974	CUSHMAN NO 1 & NO 2	WA	SKOKOMISH N FK	81000		46001	460
06/12/1974	CUSHMAN NO 1 & NO 2	WA	SKOKOMISH N FK	43200		46002	460
06/24/1974	BEAR VALLEY & LAKE WOHLFORD	CA	ESCONDIDO CR	1500		17601	176
06/24/1974	BEAR VALLEY & LAKE WOHLFORD	CA	ESCONDIDO CR	520		17602	176
06/24/1974	BEAR VALLEY & LAKE WOHLFORD	CA	ESCONDIDO CR			17603	176
06/[illegible]6/1974	KAWEAH	CA	KAWEAH	2250		29803	298
06/[illegible]6/1974	KAWEAH	CA	KAWEAH	1800		29801	298
06/[illegible]6/1974	KAWEAH	CA	KAWEAH	2800		29802	298
10/23/1975	OLMSTED	UT	PROVO RIVER	10300		59601	596
11/23/1975	MOKELUMNE	CA	MOKELUMNE N FK	29700		13705	137
11/23/1975	MOKELUMNE	CA	MOKELUMNE N FK	9350		13704	137
11/23/1975	MOKELUMNE	CA	MOKELUMNE N FK	51000		13703	137
11/23/1975	MOKELUMNE	CA	MOKELUMNE N FK	136000		13702	137
11/23/1975	MOKELUMNE	CA	MOKELUMNE N FK	69130		13701	137
06/[illegible]3/1976	GLINES CANYON	WA	ELWHA	12050		58801	588
06/16/1976	LOCK NO 7	KY	KENTUCKY	2040		53901	539
11/22/1976	WALTERS	NC	PIGEON	108000		43201	432
07/19/1977	SHAWANO	WI	WOLF	64		71001	710
10/27/1977	SAN JUAN	AK	SAN JUAN LAKE	100		225101	2251
10/27/1977	SKAGIT RIVER	WA	SKAGIT	150000		55301	553
10/27/1977	SKAGIT RIVER	WA	SKAGIT	122400		55302	553
10/27/1977	SKAGIT RIVER	WA	SKAGIT	360000		55303	553
11/06/1978	RIO BLANCO	PR	HICACO	5000		66301	663
05/22/1980	KERR	MT	FLATHEAD	168000		501	5
06/30/1980	UINTA	UT	UINTA	1200		19001	190
12/25/1980	PHOENIX	CA	STANISLAUS S FK	1600		106101	1061
09/30/1982	CRESTA & ROCK CREEK	CA	FEATHER N FK	113400		196202	1962
09/30/1982	CRESTA & ROCK CREEK	CA	FEATHER N FK	67400		196201	1962
08/23/1983	LAKE HILL	UT	COTTONWOOD CR	205		121202	1212
08/23/1983	LAKE HILL	UT	MISC. MOUNTAIN SPRINGS			121201	1212
12/06/1983	RADFORD	VA	LITTLE CR	800		123501	1235
05/30/1984	AZUSA	CA	SAN GABRIEL	3000		125001	1250
06/10/1984	TWIN FALLS	ID	SNAKE	8438		1801	18
12/10/1985	BUZZARD ROOST	SC	SALUDA	15000		126701	1267
03/31/1985	KINGS RIVER	CA	KINGS N FK	150000		198802	1988
03/31/1985	KINGS RIVER	CA	KINGS N FK	75000		198801	1988
02/28/1986	WALLOWA FALLS	OR	WALLOWA E FK	1100		30801	308
11/30/1986	POOLE	CA	LEEVINING CR	10000		138801	1388
11/30/1986	RUSH CREEK	CA	RUSH CR	8400		138901	1389
11/30/1986	LUNDY	CA	MILL CR	3000		139001	1390
11/30/1986	BISHOP CREEK	CA	BISHOP CR	21875		139401	1394
11/30/1986	BISHOP CREEK	CA	BISHOP CR	0		139402	1394
11/30/1986	BISHOP CREEK	CA	BISHOP CR	0		139404	1394
11/30/1986	BISHOP CREEK	CA	BISHOP CR	0		139403	1394
12/31/1986	TOMAHAWK	WI	WISCONSIN	2600		194001	1940
06/30/1987	SUTHERLAND	NE	CANAL FROM N & S PLATTE	26100		183501	1835
07/29/1987	CENTRAL NEBRASKA	NE	CANAL FROM PLATTE	19000		141701	1417
07/29/1987	CENTRAL NEBRASKA	NE	CANAL FROM PLATTE	18000		141702	1417
07/29/1987	CENTRAL NEBRASKA	NE	NORTH PLATTE	50000		141704	1417
07/29/1987	CENTRAL NEBRASKA	NE	PLATTE&CANAL FROM PLATTE	19000		141703	1417
12/31/1987	ASHTON & ST ANTHONY	ID	HENRYS FORK OF SNAKE RI	910		238102	2381
12/31/1987	WILLIAMS	ME	KENNEBEC	13000		233501	2335

• 12/31/1987	WEST BUXTON	ME	SACO	2625		253101	2531
• 12/31/1987	MILLVILLE	WV	SHENANDOAH	2940		234301	2343
• 12/31/1987	CATARACT	ME	SACO	6650		252801	2528
• 12/31/1987	ASHTON & ST ANTHONY	ID	HENRYS FORK OF SNAKE RI	5800		238101	2381
• 12/31/1987	MATTACEUNK	ME	PENOBSCOT	19200		252001	2520
• 12/31/1987	VEAZIE	ME	PENOBSCOT	8400		240301	2403
• 12/31/1987	PIEDMONT	SC	SALUDA	1000		242801	2428
• 12/31/1987	EASTMAN FALLS	NH	PEMIGEWASSET	4600		245701	2457
• 12/31/1987	GRESHAM	WI	RED	275		248401	2484
• 12/31/1987	HAWKS NEST & GLEN FERRIS	WV	KANAWHA	5450		251201	2512
• 12/31/1987	HAWKS NEST & GLEN FERRIS	WV	NEW	102000		251202	2512
• 12/31/1987	BEAVER RIVER	NY	BEAVER	1500		259301	2593
• 12/31/1987	ELLSWORTH-GRAHAM	ME	UNION			272702	2727
• 12/31/1987	ELLSWORTH-GRAHAM	ME	UNION	8900		272701	2727
• 12/31/1987	KANSAS RIVER	KS	KANSAS	1850		264401	2644
• 12/31/1987	LAMOILLE RIVER	VT	LAMOILLE	2880		220504	2205
• 12/31/1987	WEST BUXTON	ME	SACO RIVER	4100		253102	2531
• 12/31/1987	GRANDFATHER FALLS	WI	WISCONSIN	17240		196601	1966
• 12/31/1987	LAMOILLE RIVER	VT	LAMOILLE	5000		220501	2205
• 12/31/1987	LAMOILLE RIVER	VT	LAMOILLE	6000		220502	2205
• 12/31/1987	LAMOILLE RIVER	VT	LAMOILLE	3000		220503	2205
• 03/31/1988	HOLYOKE NO .	MA	CONNECTICUT CANAL	800		238701	2387
• 05/24/1988	MORRIS SHEPPARD	TX	BRAZOS	22500		149001	1490
• 06/30/1988	FLINT CREEK	MT	FLINT CR	1100		147301	1473
• 08/31/1988	SALMON CREEK & ANNEX CREEK	AK	ANNEX CR	3500		230702	2307
• 08/31/1988	SALMON CREEK & ANNEX CREEK	AK	SALMON CR UPPER	9500	26	230701	2307
• 10/26/1986	DRY SPRUCE	AK	DRY SPRUCE BAY	75		143201	1432
• 10/31/1988	MENASHA	WI	FOX RIVER	250		235201	2352
• 10/31/1988	BADGER-RAPIDE CROCHE	WI	FOX	2400		267703	2677
• 10/31/1988	BADGER-RAPIDE CROCHE	WI	FOX	3600		267702	2677
• 10/31/1988	BADGER-RAPIDE CROCHE	WI	FOX	2000		267701	2677
• 12/31/1988	VICTORIA	MI	ONTONAGON			186401	1864
• 12/31/1988	VICTORIA	MI	W. BRANCH ONTONAGON	12000		186402	1864
• 12/31/1988	VICTORIA	MI	W. BRANCH ONTONAGON			186403	1864
• 12/31/1988	PENSACOLA	OK	GRAND NEOSHO	86400		149401	1494
• 12/31/1988	LYONS FALLS	NY	BLACK	2000		254802	2548
• 12/31/1988	LYONS FALLS	NY	BLACK	1050		254801	2548
• 12/31/1988	VICTORIA	MI	S. BRANCH ONTONAGON			186404	1864
• 12/31/1988	PROSPECT NO 2	O	ROGUE S FK	7200		233701	2337
• 12/31/1988	LYONS FALLS	NY	BLACK	5090		254803	2548

Hydroelectric Relicensing Proceedings Involving Competing Applications As of May 1985

Project Name and Number

a. owner (including whether owner is a "state" or "municipality" or other
b. rated capacity
c. location
d. expiration date of current license
e. date of relicensing, if applicable
f. competing applicant name(s) and designated FERC project number(s).

(Note: When a license expires, the project continues to operate under automatically-issued annual licenses. See Section 15(a), 16 U.S.C. § 808(a)).

1. Mokelumne Project No. 137

a. Pacific Cas and Electric Company (private)
b. 192,750 KW
c. North Fork Mokelumne River, CA
d. 11/23/75
e. has not yet been relicensed
f. The City of Santa Clara, CA (municipal) filed a competing application designated as FERC Project No. 2745.

2. Olmsted Project No. 596

a. Utah Power and Light Company (private)
b. 10,300 KW
c. Provo River, Utah
d. 10/20/75
e. has not yet been relicensed.
f. The City of Bountiful, Utah (municipal) and Utah Municipal Power Company (municipal) filed competing applications designated as FERC Project Nos. 4040 and 4029, respectively.

3. Rock Creek-Cresta Project No. 1962

   a. Pacific Gas and Electric Company (private)
   b. 180,900 KW
   c. North Fork Feather River, CA
   d. 9/30/82
   e. has not yet been relicensed
   f. Sacramento Municipal Utility District, Northern California Power Agency and the Cities of Anaheim, Azusa, Banning, Colton and Riverside, CA (municipal) filed a competing application designated as FERC Project No. 3223.

4. Weber Project No. 1744

   a. Utah Power and Light Company (private)
   b. 3,465 KW
   c. Weber River, Utah
   d. 6/30/70
   e. has not yet been relicensed
   f. The City of Bountiful, Utah (municipal) filed a competing application designated as FERC Project No. 2747.

5. Phoenix Project No. 1061

   a. Pacific Gas and Electric Company (private)
   b. 1,800 KW
   c. South Fork Stanislaus River, CA
   d. 12/25/80
   e. has not yet been relicensed
   f. The Tuolumne County Water District (municipal) filed a competing application designated as FERC Project No. 4309.

6. Shawano Project No. 710

   a. Wisconsin Power and Light Company (private)
   b. 640 KW
   c. Wolf River, WI
   d. 7/19/77
   e. has not yet been relicensed
   f. The City of Shawano (municipal) filed a competing application designated as FERC Project No. 2865.

7. Rush Creek Project No. 1389

   a. Southern California Edison Company (private)
   b. 8,400 KW
   c. Rush Creek, CA
   d. 11/30/86
   e. has not yet been relicensed
   f. June Lake Public Utility District (municipal) filed a competing application designated as FERC Project No. 6930.

8. Poole Project No. 1388

   a. Southern California Edison Company (private)
   b. 10,000 KW
   c. Lee Vining Creek, CA
   d. 11/30/86
   e. has not yet been relicensed
   f. City of Vernon, CA (municipal) filed a competing application designated as FERC Project No. 7263.

9. Walters Project No. 432

   a. Carolina Power and Light Company (private)
   b. 108,000 KW
   c. Pigeon River, NC
   d. 11/22/76
   e. has not yet been relicensed
   f. North Carolina Electric Membership Corporation (private) filed a competing application designated as FERC Project No. 2748.

10. Kerr Project No. 5

   a. The Montana Power Company (private)
   b. 168,000 KW
   c. Flathead River, Montana
   d. 5/22/80
   e. has not yet been relicensed
   f. The Confederated Salish and Kootenai Tribes of the Flathead Reservation (private) filed a competing application designated as FERC Project No. 2776.

11. Grandfather Falls Project No. 1966

    a. Wisconsin Public Service Company (private)
    b. 17,240 kW
    c. Wisconsin River, WI
    d. 12/31/87
    e. has not yet been relicensed
    f. The Wisconsin Public Power Inc. System (municipal) filed a competing application designated as FERC Project No. 8243.

12. Azusa Project No. 1250

    a. City of Pasadena, California (Public)
    b. 3,000 kW
    c. San Gabriel River, CA
    d. 12/31/84
    e. has not yet been relicensed
    f. The San Gabriel Hydroelectric Partnership (private) filed a competing application for exemption designated as FERC Project No. 8764.

13. Hudson Falls Project No. 5276 (Formerly Project No. 2482)

    a. Niagara Mohawk Power Corporation (Private)
    b. 7,050 kW
    c. Hudson River, NY
    d. 5/18/84
    e. has not yet been relicensed
    f. The Long Lake Energy Corporation (private) filed a competing application designated as FERC Project No. 4128.

14. South Glen Falls Project No. 5461 (Formerly Project No. 2482)

    a. Niagara Mohawk Power Corporation (Private)
    b. 12,000 kW
    c. Hudson River, NY
    d. 5/18/84
    e. has not yet been relicensed
    f. The Long Lake Energy Corporation (private) filed a competing application designated as FERC Project No. 4331.

15. Mechanicville Project No. 6032 (Formerly Project No. 2500)

    a. Niagara Mohawk Power Corporation (Private)
    b. 12,000 kW
    c. Hudson River, NY
    d. 5/18/84
    e. has not yet been relicensed
    f. The Long Lake Energy Corporation (private) and the New York State Research and Development Authority (public) filed competing applications designated as Project Nos. 4687 and 5799, respectively.

16. Oswego River Project No. 5984

a. Niagara Mohawk/City of Oswego
b. 18,000 kW
c. Oswego River, NY
d. 5/18/84
e. has not yet been relicensed
f. Carlson Leto, Inc. (private), designated as FERC Project No. 6570.

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

July 9, 1985

Honorable Frank H. Murkowski
Chairman, Subcommittee on Water
  and Power
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

In response to your letter dated June 24, 1985, I am enclosing for inclusion in the Subcommittee hearing record of June 11, 1985, responses to questions submitted by Senator Evans, as well as analyses of S. 1219 and S. 1260. I reiterate the statement in my testimony that the views expressed herein are my own and not necessarily those of the Commission or any other Commissioner.

At this time, it is not possible to compile a complete list of projects, licensees, and applicants which would be subject to the "savings clauses" of S. 1219 and S. 1260. S. 1219 would not apply to any project for which an application is pending on the date of enactment. Since licensing decisions may be made for projects on which applications are currently pending and new applications may be filed for licenses that are pending, but not decided when the bill is enacted, it cannot be determined what applications would be pending at an uncertain date in the future on which S. 1219 might be enacted. The provisions of S. 1260 would not apply to any application pending upon enactment or any application filed for a project if the current term expires prior to 1989. As with S. 1219, it cannot be determined what applications would be pending upon enactment. In addition, it cannot be determined what applications might be filed subsequent to enactment for projects with licenses expiring prior to 1989.

I am submitting to the Subcommittee the enclosed list of those projects with licenses expiring prior to 1989, showing the date of expiration of the current license and identity of the existing licensee, and a list of projects for which competing applications have been filed.

If I can be of further assistance in this or any other Commission matter, please let me know.

Sincerely,

A. G. Sousa
Commissioner

Enclosures

Enclosure

Analysis of S. 1219, "Fair Competition in Hydroelectric Licensing Act of 1985"

S. 1219 would amend Sections 7(a) and 15(a) of the Federal Power Act (FPA), 16 U.S.C. §§ 800(a), 808(a), to specifically require that under Section 7(a) preference be given to applications by states and municipalities (hereinafter "municipalities") in relicensing competition regardless of whether the original licensee is competing for the new license. Thus, to the extent that a municipality's plans are deemed equally as well adapted to serve the public interest as those of any other non-municipal competitors, the Commission would be required to issue a new license to that municipal applicant. S. 1219 would, however, eliminate the current statutory right granted to municipal competitors to amend their plans to make them equally as well adapted as those of a non-municipal competitor. A municipality's right to amend a relicense application at any time in the proceeding would thus be governed by the same procedural rules that apply to all competing relicense applications.

S. 1219 would not alter the current statutory basis for compensating an original licensee in the event a new license is issued to a new licensee. Compensation would be based on net investment plus severance damages as set forth in Section 14 of the FPA, 16 U.S.C. § 807(a). The proposed legislation would augment this compensation by revising Section 15(a) of the FPA to require the new licensee to provide the previous licensee up to 25 percent of the relicensed project's output for one fifth of the new license term. Such power would be provided at the new licensee's cost of power and energy from the project. It is not clear what determines the percentage of output to be provided or how the cost of power and energy provided an existing licensee are to be calculated. Such power costs could be calculated on the basis of the cost of acquisition (net investment plus severance damages) of the project by the new licensee plus operation and maintenance costs, administrative costs and annual charges. Inasmuch as S. 1219 retains the net investment-based compensation, power costs should be substantially less than avoided energy costs.

Proposed new Section 15(a) requires that the sale of project output to the previous licensee not adversely affect the status of any bonds, notes or obligations of the new licensee. To the extent that providing relatively inexpensive power to the previous licensee would "adversely affect" such obligations, it is not clear whether the provision for output sales would not apply, or whether the cost of power would have to be increased to a level that would not affect the status of these obligations.

If the new licensee is a municipal utility, this sale to the previous licensee would not be within the Commission's ratemaking authority, since a municipal utility is not a "public utility" as defined under Section 201 of the FPA.

S. 1219 contains a number of provisions that would enhance the ability of any non-licensee to compete for a new license:

(1) Proposed Section 7(d)(3) would require existing licensees to make available to entities planning to file a competing application for new license "all plans, drawings, designs, data, and any other information relating to the construction and operation of the project necessary to enable such applicant to file a competing application . . ." The licensee would be entitled to the reasonable costs of providing such information. Competitors would also be guaranteed access to project works and lands upon reasonable advance notice.

There is currently no provision in the Commission regulations that would require existing licensees, in advance of filing an application for a new license, to share data, designs, studies and other information necessary to file a competing application for a new license. Once an application is filed, it becomes public information and available to competing applicants. Further information supporting the filed application may be obtained through petitioning for discovery under the Commission's general procedural rules. 18 C.F.R. Part 385. The Commission in Pacific Gas and Electric Company, Project No. 173, City of Santa Clara, California, Project No. 2745, 56 FPC 1049 (1976), ordered an existing licensee to disclose historical information regarding the operation of its project to a competing applicant for a new license, but declined to require disclosure of certain studies that were considered the licensee's work product. In denying disclosure, the Commission noted that granting discovery of those studies would in effect compel the existing licensee to underwrite the efforts of its competitor.

(2) Proposed Section 7(d)(4) would require licensees to agree to perform joint studies with other competing applicants willing to share in the costs, provided that (1) such studies would otherwise be duplicative of studies to be performed by the existing licensee, and (2) the relevant government agency that recommends or reviews such studies approves the joint study plan.

It appears that the proposed legislation would vest in the Commission the authority to resolve any dispute whether a separate study would be duplicative and any dispute regarding respective roles and responsibilities in carrying out any joint study. Two questions arise with respect to this provision. First, a licensee may not know, at the time it engages in such studies, who its competitors will be, and therefore joint studies may be unfeasible. Also, if the competitors would have access to such studies at mere duplication costs under proposed Section 7(d)(3), it is not clear what incentive they would have to engage in joint studies at shared cost.

(3) Section 15 of the FPA would be amended to provide that the Commission shall not, in evaluating competing relicense applications, consider whether an applicant has adequate transmission facilities.

This provision would limit the Commission's ability to consider such factors as the effect on ratepayers of additional costs incurred to obtain such transmission and the effect of transmission-related difficulties on the efficient operation of the project. Such a restriction would hamper the Commission's ability to assure that the broad public interest is served.

(4) To complement the above provision, proposed Section 7(g) would require the Commission to order existing licensees to provide the new licensee transmission services over its facilities and to increase transmission capacity of any bulk transmission facility when necessary to permit transmission of the output of the project. Proposed Section 7(f) would require that all new licenses issued under Section 15 be conditioned to require any "electric utility licensee" to provide transmission services and increase bulk power transmission facilities if "necessary or appropriate in order to conserve energy, promote the efficient use of the bulk power supply market, or is otherwise in the public interest." It should be noted that the transmission rate authority of the Commission under Section 205 of the FPA relates only to public utilities, which excludes municipal licensees. Since proposed Section 7(f) refers to "any electric utility licensee," it could arguably expand the Commission's current jurisdiction.

Proposed Sections 7(f) and 7(g) would substantially expand the Commission's current authority to order wheeling. The proposed standards to order wheeling amend the existing standards in

Sections 211 and 212 of the FPA. For example, Section 211(c)(1) provides that the Commission shall not order mandatory transmission "unless the Commission determines that such order would reasonably preserve existing competitive relationships" (emphasis added). Proposed Section 7(f) would alter this finding to merely require a determination that the order would "increase competition in the bulk power supply market" (emphasis added). Section 211(a)(2)(B) currently authorizes the Commission to order wheeling that would, *inter alia*, "significantly promote the efficient use of facilities and resources" (emphasis added). Proposed Section 7(f) would delete the word "significantly" and thereby reduce the threshold showing required. Similarly, current Section 211(a)(1) authorizes wheeling that the Commission finds "is in the public interest" and meets a variety of other standards set forth therein. Proposed Section 7(f) would add "is otherwise in the public interest" as an independent basis for ordering wheeling. Additionally, Section 212 of the FPA provides a number of constraints on the Commission's current authority to order mandatory transmission service that are not incorporated in proposed Sections 7(f) and 7(g).

S. 1219 retains Section 10(a) of the FPA, 16 U.S.C. § 803(a), as the standard for judging the merits of competing applications. However, the bill specifically designates two criteria for the standard. First, clause (A), in part, paraphrases the current Section 10(a) standard and specifically adds to it the ability of "each applicant to achieve efficiency in the production and consumption of electric power . . . ." Although the ability of an applicant to operate a project is clearly a factor under the current Section 10(a) standard, the Commission has not had occasion to address the extent to which "efficiency in production and consumption of electric power" could be considered. A licensee's ability to promote and comply with Federal and state energy policies, including conservation, would be a factor to consider and weigh with other public interest factors. To the extent, however, that this provision would require an exhaustive examination of past or future compliance with regulatory requirements handled at the Federal, state, or local level, it would be inappropriate, would encumber the progress of the proceeding, and could obscure the proper scope of the Federal concerns in relicensing.

Clause (B) would require consideration of adverse impacts on fish, wildlife, natural, cultural and recreational resources, mitigation of any such impacts, and public use and benefit to be derived from such resources. All of these factors are currently considered by the Commission under Section 10(a).

To the extent such specific criteria may conflict or create ambiguities with the broad public interest criteria in Section 10(a), the Commission's relicensing decisions may be embroiled in confusion and litigation. For the most part, these criteria are encompassed under the current Section 10(a) standard. Therefore, the Commission's current scope of comparison of competing applications under Section 10(a) might not be measurably altered. However, if the law is amended to specify only some elements of the public interest that are potentially affected in relicensing, while omitting others, it is unclear what weight should be ascribed to any item in the context of a balanced relicensing decision. For example, do the specified public interest factors take on more importance than other factors usually considered under the Section 10(a) standard? Under the current Section 10(a) mandate, the Commission has the discretion to attribute appropriate weight to any one public interest factor in light of the circumstances of the particular case before it.

S. 1219 would revise current procedures for considering the potential anti-competitive effects of applications for new license. Pursuant to Section 10(h) of the FPA, 16 U.S.C. § 803(h), in all licensing proceedings the Commission must prohibit arrangements to restrain trade, fix prices or otherwise violate Federal antitrust laws. Prior to issuing a license, the Commission conducts a review of antitrust considerations that relate to the operation of the hydroelectric facility, and imposes conditions where needed to avoid antitrust violations. The proposed new Section 15(c) of the Federal Power Act does not appear to alter this obligation or the scope of the Commission's review. However, the language of the provision, "that the activities under such license would tend to create or maintain a situation inconsistent with the antitrust laws" (emphasis added), raises questions whether a lesser standard is intended than that provided in Section 10(h) of the Federal Power Act. It would also alter the procedures on relicensing by requiring that all applications for new licenses be submitted to the Attorney General for advice regarding potential antitrust implications. The Commission would then be required to consider such advice in issuing and conditioning a new license. This procedure appears unnecessary and duplicative since such a review is currently conducted by the Commission as required under Sections 10(h) and 10(a).

S. 1219 would add new Section 15(c) to require that the Commission issue any new license no later than 12 months prior to the expiration date of the existing license. This new subsection would conflict with the Commission's authority under Section 15(a) to issue annual licenses upon the expiration of an original license. This requirement would also seriously jeopardize the Commission's ability to conduct proceedings appropriate to the circumstances of each specific project.

On a matter not related to the relicensing of hydropower projects, S. 1219 would repeal Section 405(d) of the Public Utility Regulatory Policies Act (PURPA) and thus limit exemptions from licensing to the narrow category of projects that qualify as conduit hydroelectric facilities subject to exemption under Section 213 of PURPA. 16 U.S.C. § 823(a). It appears that this repeal would have no effect on exemptions that are final for purposes of administrative action. However, without the inclusion of a savings clause or without express reserved authority it is unclear to what extent, if any, the Commission would retain authority over issued exemptions. Without such authority, the Commission would be unable to enforce the standard terms and conditions set forth in 18 C.F.R. § 4.106 or to amend exemptions to accommodate future changes in circumstances.

Another amendment to PURPA proposed by S. 1219 provides that the provisions of Section 210 that grant special status to cogenerators and small power producers would not apply to projects that utilize new dams or diversions. Only qualified dams on which construction had begun prior to passage of the bill would be entitled to "qualifying status."

Enclosure

Analysis of S. 1260, "Hydroelectric Relicensing Reform Act of 1985"

S. 1260 proposes to amend Sections 7, 14 and 15 of the Federal Power Act (FPA) to provide for municipal preference on relicensing when the competing plans are deemed equally well adapted. When municipal preference cannot operate, i.e., if all or none of the competitors are states or municipalities, the existing licensee would be preferred in the event of a tie. In all other situations, the applicant with the plans deemed best adapted to serve the public interest would be granted the license.

S. 1260 would eliminate the Section 10(a) comprehensive development standard as the basis for judging relicense applications. Instead, S. 1260 creates a separate public interest standard in proposed Section 15(c)(3) that requires the Commission to consider: (a) the economic impact on the existing licensee's customers; (b) any impairment from loss of the project that might result in the existing licensee's ability to meet its load requirements; (c) fish and wildlife impacts; and (d) energy efficiency programs of the competitors. This listing of specific criteria to be considered in an evaluation of the suitability of an applicant's plans under the public interest standard raises interpretive questions for the Commission. The current standard used in licensing and relicensing determinations is a broad public interest standard that encompasses each of the criteria listed in the bill in addition to many others. To the extent the public interest standard adopted by S. 1260 requires consideration of all factors in the public interest, as does the current standard, a question is created as to the weight that should be ascribed to any item in the context of a balanced relicensing decision. It is unclear whether the specific criteria listed are more important than other public interest factors usually considered.

In addition to the above-listed items, S. 1260 directs that the Commission consider how the competing plans are adapted to any state-developed comprehensive plan (or in the Northwest, a Pacific Northwest Electric Power and Conservation Planning Council-developed plan) or, if there is no plan, the recommendations of state and Federal agencies and Indian tribes exercising administration over resources and public purposes at the project. The Commission's independent comprehensive development responsibilities under Section 10(a) of the FPA are thus eliminated on relicensing.

The broad mandate of Section 10(a) requires the Commission to consider all issues relevant to the public interest, including state-wide or regional concerns. Under this standard, regional and state comprehensive plans may be considered by the Commission in making its licensing decision. Such plans are evaluated and weighed in conjunction with other factors affecting the public interest to ensure that the Commission reaches a balanced independent decision with respect to the public interest. Therefore, substitution of state or regional comprehensive plans for the Commission's current Section 10(a) comprehensive development authority would narrow the current scope of evaluation at relicensing.

In those instances where a state-developed comprehensive plan does not exist, S. 1260 does not address how conflicts among the recommendations of state and Federal agencies and Indian tribes are to be resolved. Currently under Section 10(a), the Commission serves as the final arbiter of what constitutes comprehensive development except to the extent that a Federal agency may exercise its independent authority with respect to Federal reservations under Section 4(e) of the FPA.

Procedurally, S. 1260 would regulate the amendment of applications to ensure all competitors equal opportunities to upgrade their applications. This would eliminate the opportunity municipalities currently have under Section 7(a) to amend their relicensing applications to equal their competitors' plans. Under S. 1260 existing licensees must give notice three years in advance of expiration of the license of their intent to file applications and are given six months thereafter to file. Competitors must file within six months thereafter. All competitors then have a right (no later than one year prior to license expiration) to amend their proposals to improve upon the applications previously filed.

In the event a new licensee is selected to take over a licensed project, S. 1260 retains the statutory net investment basis for compensating an original licensee. Proposed Section 15(d)(4) would, however, require the new licensee also to pay 50 percent of the additional cost incurred by the original licensee to obtain alternative power for the term of the license. Any such payments must be passed directly to the customers of the existing licensee.

Proposed Section 15(c)(2) directs that new licenses shall be issued for a period not to exceed 30 years, unless the Commission determines a longer license term is necessary to best serve the public interest. Although S. 1260 does not indicate a maximum license term on relicensing, the 50-year maximum imposed by Section 6 of the FPA on all licenses issued under Part I would continue to govern new licenses issued under Section 15 as amended by S. 1260.

The provisions of S. 1260 would not apply to any application for new license pending before the Commission as of the date of enactment of the Act for a license for a project for which an existing license expires prior to January 1, 1989. A determination of the projects or applicants to which the bill, if enacted, would apply cannot be made with certainty. During the period before enactment of the bill, licensing decisions may be made for projects on which applications are currently pending; and new applications may be filed for licenses that are pending, but not yet decided when the bill is enacted, or subsequent to enactment for licenses expiring prior to 1989. The attached lists, however, itemize projects for which license terms expire prior to 1989 and projects for which competing applications have been filed.

Enclosure

Hydroelectric Relicensing Proceedings Involving Competing Applications As of May 1985

Project Name and Number

a. owner (including whether owner is a "state" or "municipality" or other
b. rated capacity
c. location
d. expiration date of current license
e. date of relicensing, if applicable
f. competing applicant name(s) and designated FERC project number(s).

(Note: When a license expires, the project continues to operate under automatically-issued annual licenses. See Section 15(a), 16 U.S.C. § 808(a)).

1. Mokelumne Project No. 137

   a. Pacific Gas and Electric Company (private)
   b. 192,750 KW
   c. North Fork Mokelumne River, CA
   d. 11/23/75
   e. has not yet been relicensed
   f. The City of Santa Clara, CA (municipal) filed a competing application designated as FERC Project No. 2745.

2. Olmsted Project No. 596

   a. Utah Power and Light Company (private)
   b. 10,300 KW
   c. Provo River, Utah
   d. 10/20/75
   e. has not yet been relicensed.
   f. The City of Bountiful, Utah (municipal) and Utah Municipal Power Company (municipal) filed competing applications designated as FERC Project Nos. 4040 and 4029, respectively.

3. Rock Creek-Cresta Project No. 1962

a. Pacific Gas and Electric Company (private)
b. 180,900 KW
c. North Fork Feather River, CA
d. 9/30/82
e. has not yet been relicensed
f. Sacramento Municipal Utility District, Northern California Power Agency and the Cities of Anaheim, Azusa, Banning, Colton and Riverside, CA (municipal) filed a competing application designated as FERC Project No. 3223.

4. Weber Project No. 1744

a. Utah Power and Light Company (private)
b. 3,465 KW
c. Weber River, Utah
d. 6/30/70
e. has not yet been relicensed
f. The City of Bountiful, Utah (municipal) filed a competing application designated as FERC Project No. 2747.

5. Phoenix Project No. 1061

a. Pacific Gas and Electric Company (private)
b. 1,800 KW
c. South Fork Stanislaus River, CA
d. 12/25/80
e. has not yet been relicensed
f. The Tuolumne County Water District (municipal) filed a competing application designated as FERC Project No. 4309.

6. Shawano Project No. 710

a. Wisconsin Power and Light Company (private)
b. 640 KW
c. Wolf River, WI
d. 7/19/77
e. has not yet been relicensed
f. The City of Shawano (municipal) filed a competing application designated as FERC Project No. 2865.

7. Rush Creek Project No. 1389

   a. Southern California Edison Company (private)
   b. 8,400 KW
   c. Rush Creek, CA
   d. 11/30/86
   e. has not yet been relicensed
   f. June Lake Public Utility District (municipal) filed a competing application designated as FERC Project No. 6930.

8. Poole Project No. 1388

   a. Southern California Edison Company (private)
   b. 10,000 KW
   c. Lee Vining Creek, CA
   d. 11/30/86
   e. has not yet been relicensed
   f. City of Vernon, CA (municipal) filed a competing application designated as FERC Project No. 7263.

9. Walters Project No. 432

   a. Carolina Power and Light Company (private)
   b. 108,000 KW
   c. Pigeon River, NC
   d. 11/22/76
   e. has not yet been relicensed
   f. North Carolina Electric Membership Corporation (private) filed a competing application designated as FERC Project No. 2748.

10. Kerr Project No. 5

   a. The Montana Power Company (private)
   b. 168,000 KW
   c. Flathead River, Montana
   d. 5/22/80
   e. has not yet been relicensed
   f. The Confederated Salish and Kootenai Tribes of the Flathead Reservation (private) filed a competing application designated as FERC Project No. 2776.

11. Grandfather Falls Project No. 1966

    a. Wisconsin Public Service Company (private)
    b. 17,240 kW
    c. Wisconsin River, WI
    d. 12/31/87
    e. has not yet been relicensed
    f. The Wisconsin Public Power Inc. System (municipal) filed a competing application designated as FERC Project No. 8243.

12. Azusa Project No. 1250

    a. City of Pasadena, California (Public)
    b. 3,000 kW
    c. San Gabriel River, CA
    d. 12/31/84
    e. has not yet been relicensed
    f. The San Gabriel Hydroelectric Partnership (private) filed a competing application for exemption designated as FERC Project No. 8764.

13. Hudson Falls Project No. 5276 (Formerly Project No. 2482)

    a. Niagara Mohawk Power Corporation (Private)
    b. 7,050 kW
    c. Hudson River, NY
    d. 5/18/84
    e. has not yet been relicensed
    f. The Long Lake Energy Corporation (private) filed a competing application designated as FERC Project No. 4128.

14. South Glen Falls Project No. 5461 (Formerly Project No. 2482)

    a. Niagara Mohawk Power Corporation (Private)
    b. 12,000 kW
    c. Hudson River, NY
    d. 5/18/84
    e. has not yet been relicensed
    f. The Long Lake Energy Corporation (private) filed a competing application designated as FERC Project No. 4331.

15. Mechanicville Project No. 6032 (Formerly Project No. 2500)

    a. Niagara Mohawk Power Corporation (Private)
    b. 12,000 kW
    c. Hudson River, NY
    d. 5/18/84
    e. has not yet been relicensed
    f. The Long Lake Energy Corporation (private) and the New York State Research and Development Authority (public) filed competing applications designated as Project Nos. 4687 and 5799, respectively.

16. Oswego River Project No. 5984

- a. Niagara Mohawk/City of Oswego
- b. 18,000 KW
- c. Oswego River, NY
- d. 5/18/84
- e. has not yet been relicensed
- f. Carlson Leto, Inc. (private), designated as FERC Project No. 6570.

EXPIRING PRIOR TO 1989

LIC-EXP-DT	PROJ-NAME	ST	DEV-STREAM-NAME	DEV-CAP-INST	DEV-CAP-PROP	DEV-NO	PROJ-NO
***							
* 06/30/1970	WEBER	UT	WEBER	3465		174401	1744
* 12/13/1973	WELLS RURAL	NV	TROUT CR	0		84801	848
* 06/02/1974	CUSHMAN NO 1 & NO 2	WA	SKOKOMISH N FK	81000		46001	460
* 06/02/1974	CUSHMAN NO 1 & NO 2	WA	SKOKOMISH N FK	43200		46002	460
* 06/24/1974	BEAR VALLEY & LAKE WOHLFORD	CA	ESCONDIDO CR	1500		17601	176
* 06/24/1974	BEAR VALLEY & LAKE WOHLFORD	CA	ESCONDIDO CR	520		17602	176
* 06/24/1974	BEAR VALLEY & LAKE WOHLFORD	CA	ESCONDIDO CR			17603	176
* 06/06/1974	KAWEAH	CA	KAWEAH	1250		29803	298
* 06/06/1974	KAWEAH	CA	KAWEAH	1800		29801	298
* 06/06/1974	KAWEAH	CA	KAWEAH	2500		29802	298
* 10/23/1975	OLMSTED	UT	PROVO RIVER	10300		59601	596
* 11/23/1975	MOKELUMNE	CA	MOKELUMNE N FK	19700		13705	137
* 11/23/1975	MOKELUMNE	CA	MOKELUMNE N FK	925		13704	137
* 11/23/1975	MOKELUMNE	CA	MOKELUMNE N FK	51000		13703	137
* 11/23/1975	MOKELUMNE	CA	MOKELUMNE N FK	13600		13702	137
* 11/23/1975	MOKELUMNE	CA	MOKELUMNE N FK	69100		13701	137
* 06/03/1976	GLINES CANYON	WA	ELWHA	12050		58801	588
* 06/16/1976	LOCK NO 7	KY	KENTUCKY	2040		53901	539
* 11/22/1976	WALTERS	NC	PIGEON	1[illegible]		43201	432
* 07/19/1977	SHAWANO	WI	WOLF	640		71001	710
* 10/07/1977	SAN JUAN	AK	SAN JUAN LAKE	100		225101	2251
* 10/27/1977	SKAGIT RIVER	WA	SKAGIT	150000		55301	553
* 10/27/1977	SKAGIT RIVER	WA	SKAGIT	122400		55302	553
* 10/27/1977	SKAGIT RIVER	WA	SKAGIT	360000		55303	553
* 11/06/1978	RIO BLANCO	PR	MICACO	5000		66301	663
* 05/22/1980	KERR	MT	FLATHEAD	168000		501	5
* 06/30/1980	UINTA	UT	UINTA	1200		19001	190
* 12/25/1980	PHOENIX	CA	STANISLAUS S FK	1600		106101	1061
* 09/30/1982	CRESTA & ROCK CREEK	CA	FEATHER N FK	113400		196202	1962
* 09/30/1982	CRESTA & ROCK CREEK	CA	FEATHER N FK	67400		196201	1962
* 08/23/1983	LAKE HILL	UT	COTTONWOOD CR	275		121202	1212
* 08/23/1983	LAKE HILL	UT	MISC. MOUNTAIN SPRINGS			121201	1212
* 12/06/1983	RADFORD	VA	LITTLE CR	1000		123501	1235
* 05/30/1984	AZUSA	CA	SAN GABRIEL	3000		125001	1250
* 06/10/1984	TWIN FALLS	ID	SNAKE	8438		1801	18
* 12/10/1985	BUZZARD ROOST	SC	SALUDA	15000		126701	1267
* 03/31/1985	KINGS RIVER	CA	KINGS N FK	150000		198802	1988
* 03/31/1985	KINGS RIVER	CA	KINGS N FK	75000		198801	1988
* 02/28/1986	WALLOWA FALLS	OR	WALLOWA E FK	1100		30801	308
* 11/30/1986	POOLE	CA	LEEVINING CR	10000		138801	1388
* 11/30/1986	RUSH CREEK	CA	RUSH CR	8400		138901	1389
* 11/30/1986	LUNDY	CA	MILL CR	3000		139001	1390
* 11/30/1986	BISHOP CREEK	CA	BISHOP CR	21875		139401	1394
* 11/30/1986	BISHOP CREEK	CA	BISHOP CR	0		139402	1394
* 11/30/1986	BISHOP CREEK	CA	BISHOP CR	0		139404	1394
* 11/30/1986	BISHOP CREEK	CA	BISHOP CR	0		139403	1394
* 12/31/1986	TOMAHAWK	WI	WISCONSIN	2600		194001	1940
* 06/30/1987	SUTHERLAND	NE	CANAL FROM N & S PLATTE	26100		183501	1835
* 07/29/1987	CENTRAL NEBRASKA	NE	CANAL FROM PLATTE	19000		141701	1417
* 07/29/1987	CENTRAL NEBRASKA	NE	CANAL FROM PLATTE	18000		141702	1417
* 07/29/1987	CENTRAL NEBRASKA	NE	NORTH PLATTE	50000		141704	1417
* 07/29/1987	CENTRAL NEBRASKA	NE	PLATTE&CANAL FROM PLATTE	18000		141705	1417
* 12/31/1987	ASHTON & ST ANTHONY	ID	HENRYS FORK OF SNAKE RI	500		238102	2381
* 12/31/1987	WILLIAMS	ME	KENNEBEC	13000		233501	2335

•	12/31/1987	WEST BUXTON	ME	SACO	2625		253101	2531
•	12/31/1987	MILLVILLE	WV	SHENANDOAH	2840		234301	2343
•	12/31/1987	CATARACT	ME	SACO	6650		252801	2528
•	12/31/1987	ASHTON & ST ANTHONY	ID	HENRYS FORK OF SNAKE RI	5800		238101	2381
•	12/31/1987	MATTACEUNK	ME	PENOBSCOT	19200		252001	2520
•	12/31/1987	VEAZIE	ME	PENOBSCOT	8400		240301	2403
•	12/31/1987	PIEDMONT	SC	SALUDA	1000		242801	2428
•	12/31/1987	EASTMAN FALLS	NH	PEMIGEWASSET	4600		245701	2457
•	12/31/1987	GRESHAM	WI	RED	275		248401	2484
•	12/31/1987	HAWKS NEST & GLEN FERRIS	WV	KANAWHA	5450		251201	2512
•	12/31/1987	HAWKS NEST & GLEN FERRIS	WV	NEW	102000		251202	2512
•	12/31/1987	BEAVER RIVER	NY	BEAVER	1500		259301	2593
•	12/31/1987	ELLSWORTH-GRAHAM	ME	UNION	.		272702	2727
•	12/31/1987	ELLSWORTH-GRAHAM	ME	UNION	8900		272701	2727
•	12/31/1987	KANSAS RIVER	KS	KANSAS	1850		264401	2644
•	12/31/1987	LAMOILLE RIVER	VT	LAMOILLE	2880		220504	2205
•	12/31/1987	WEST BUXTON	ME	SACO RIVER	4000		253102	2531
•	12/31/1987	GRANDFATHER FALLS	WI	WISCONSIN	17240		196601	1966
•	12/31/1987	LAMOILLE RIVER	VT	LAMOILLE	5000		220501	2205
•	12/31/1987	LAMOILLE RIVER	VT	LAMOILLE	6000		220502	2205
•	12/31/1987	LAMOILLE RIVER	VT	LAMOILLE	3200		220503	2205
•	03/31/1988	HOLYOKE NO. 1	MA	CONNECTICUT CANAL	800		238701	2387
•	05/24/1988	MORRIS SHEPPARD	TX	BRAZOS	22500		149001	1490
•	06/30/1988	FLINT CREEK	MT	FLINT CR	1100		147301	1473
•	08/31/1988	SALMON CREEK & ANNEX CREE K	AK	ANNEX CR	3500		230702	2307
•	05/21/1988	SALMON CREEK & ANNEX CREE K	AK	SALMON CR UPPER	9500	2A[illegible]	230701	2307
•	10/26/1988	DRY SPRUCE	AK	DRY SPRUCE BAY	75		143201	1432
•	10/31/1988	MENASHA	W	FOX RIVER	250		235201	2352
•	10/31/1988	BADGER--RAPIDE CROCHE	WI	FOX	2400		267703	2677
•	10/31/1988	BADGER--RAPIDE CROCHE	WI	FOX	3600		267702	2677
•	10/31/1988	BADGER--RAPIDE CROCHE	WI	FOX	2000		267701	2677
•	12/31/1988	VICTORIA	MI	ONTONAGON	.		186401	1864
•	12/31/1988	VICTORIA	MI	W. BRANCH ONTONAGON	12000		186402	1864
•	12/31/1988	VICTORIA	MI	W. BRANCH ONTONAGON			186403	1864
•	12/31/1988	PENSACOLA	OK	GRAND NEOSHO	86400		149401	1494
•	12/31/1988	LYONS FALLS	NY	BLACK	2000		254802	2548
•	12/31/1988	LYONS FALLS	NY	BLACK	1150		254801	2548
•	12/31/1988	VICTORIA	MI	S. BRANCH ONTONAGON			186404	1864
•	12/31/1988	PROSPECT NO 2	O	ROGUE S FK	7200		233701	2337
•	12/31/1988	LYONS FALLS	NY	BLACK	5790		254803	2548

Responses of Commissioner A. G. Sousa to Questions Submitted by Senator Evans for Inclusion in the Hearing Record of June 11, 1985, of the Subcommittee on Water and Power

Question 1: On p. 2 of your testimony, you mention that "there is uncertainty surrounding the relicensing process that will persist until final court action occurs."

(a) Is it the judgment of the Commission that the uncertainty is high enough to make legislation necessary at this time?

(b) Would it not be prudent to wait until final court action occurs before Congress pursues legislative action?

Answer 1(a): Uncertainty exists because the Commission's decision in Merwin has been appealed to the United States Court of Appeals for the District of Columbia Circuit. Until judicial review of Merwin is completed or legislation is enacted, potential competitors for new licenses cannot know with certainty what the ground rules will be when their applications are considered. Moreover, the court can review only the contested legal issues presented by the facts of the case before it. The court's decision in Merwin, therefore, will not give definitive guidance on what the law requires on all relicensing issues. In addition to those issues on which the law may not be clear, there are relicensing issues for which the existing law, though clear, may not be an accurate reflection of current thinking on appropriate public policy.

(b) The Federal Power Act is a congressional statement of public policy on non-Federal development of hydropower resources. As such, it seems more in the public interest to have any revisions to or clarifications of it made by Congress rather than by the courts. Furthermore, as mentioned above, any court decision must address the facts of the case before the court and therefore will not necessarily provide broad, general guidance to the Commission for other relicensing decisions. The legislation that has been offered responds to several important relicensing controversies that are not before the court in Merwin. Considering the high stakes for electric ratepayers in the Commission's decisions in relicensing proceedings, it would not be prudent for Congress to wait until final court action before enacting legislation.

Question 2: Economic impact: In the Merwin ruling, you seem to have decided the "greatest good for the greatest number" as the appropriate criterion.

(a) Why is the impact on the total number of ratepayers more significant than the per capita impact?

(b) Why does the Commission use a relative economic impact analysis, if it is concerned primarily about rate stability and the economic impact upon the present licenseholder?

(c) Do you believe that the economic impact analysis should include any compensation that the existing licensee receives in the event the license is transferred?

Answer 2(a): Impact on the total number of ratepayers is a more accurate reflection of social costs and benefits, and therefore better represents the potential impact on the public interest. As the Commission stated in Merwin, "The calculation of benefits per system customer would automatically favor the competitor with the fewer number of customers, without regard to the mix of customers or their requirements. Further, giving great weight to such a calculation would inherently mean that larger benefits for the few take precedence over small benefits for the many." 25 FERC ¶ 61,052 at p. 61,199.

(b) The Commission is concerned about consumers generally. Therefore, the rate stability of the existing licensee is only part of the economic impact analysis. The Commission also includes in the analysis the benefits that would accrue to the new licensee if the license were transferred to it. These benefits to the new licensee may justify the adverse impacts on the existing licensee of losing the license.

(c) Since the Commission did not address the issue of compensation in reaching its decision in Merwin, and inasmuch as Merwin may be remanded to the Commission, any answer to this question may preclude my consideration of that issue in the future.

Question 3: License Term: What does the Commission believe that the most relevant license term is, taking into account the minimum period for full recovery of the investment, the average useful lives of additions and improvements to power facilities, the life of fish/wildlife mitigation facilities?

Answer 3: The license term, whether for an initial or new license, should be focused primarily on assuring recovery of the licensee's investment. Additional public policy and site-specific considerations may dictate a longer or, in some instances, a shorter license term. The appropriate length for the license term, therefore, varies from project to project.

The Commission's usual policy at relicensing is to limit the license term to 30 years from the end of the prior license, if no substantial new construction or redevelopment is proposed. This period gives the licensee a sufficient degree of certainty to permit integration of the project into its overall plans, while at the same time bringing the project before the Commission for consideration within a reasonable period. A license term of 40 years is granted if some development or a substantial redevelopment is proposed. The Commission has determined that substantial new construction justifies relicensing an existing project for a term of 50 years from the end of the prior license.

An initial license for a totally new project is given a 50-year term. This policy, however, is subject to deviation when appropriate. Factors may be present in any given proceeding, such as safety and adequacy considerations, that, together with policy considerations, support a different term of license.

Section 6 of the Federal Power Act imposes a 50-year maximum on all license terms.

Question 4: On p. 11 of your testimony, you indicate why you feel that "just compensation" is the most appropriate form of compensation. You state that this will most likely compensate the licensee for its actual loss, but allow for adequate flexibility.

(a) Explain in more detail what your interpretation of just compensation is, with specific reference to its flexibility. Please refer to the most relevant court decisions.

(b) In your view, who should make the determination of the calculation of just compensation, and what should be the process of cross-examination and rebuttal for both parties?

If the Commission is to make the decision and establish the methodology, please provide relevant materials.

Answer 4(a): Just compensation is a standard based on the actual economic value of the project. Such a standard allows and requires the consideration of more variables than does a standard such as the current net investment with severance damages standard. The current standard is likely to provide to the existing licensee only limited compensation that has little relation to the real present value of the project.

Because the Commission has not addressed in any of the relicensing cases that have come before it the issue of takeover compensation, it has not determined what court cases might be authoritative.

Answer 4(b): The responsibility under current law to determine takeover compensation rests with the Commission. A determination of just compensation under due process of law would require that, if there are disputed issues of fact, the parties be given an opportunity for a hearing. Whether an evidentiary, trial-type hearing would be required would depend on the circumstances of the case and the nature of the dispute.

Since the Commission has not yet been engaged in a compensation proceeding, no procedures have been established. A procedure could be devised in an actual proceeding or generically through a rulemaking.

Question 5: Pending applications:

(a) How many relicensing applications are pending before the Commission?

Please provide your most recent list, including both adversarial and non-adversarial applications?

(b) Of the pending applications, the Commission has decided to review two cases -- Bountiful and Merwin.

By what criteria and priority did you select these two licenses?

What are the Commission's plans to review the remaining pending applications?

Answer 5(a): Forty-two licenses have expired that are pending renewal. Nine more licenses will expire in 1986. Fifteen of these proceedings, in addition to one for a license expiring in 1987, involve competing applications. Enclosed are lists of (1) all licensed projects with date of expiration of the current license, identity of the existing licensee, and notation of the 95 projects that have been relicensed, (2) those projects with license terms expiring prior to 1989, and (3) those projects for which competing applications have been filed, with identity of applicants.

Answer 5(b): As indicated in (1) above, the Commission has reviewed many projects and issued new licenses. The Bountiful decision was a declaratory order deciding a purely legal issue that did not hinge on the facts of a particular case. It was precipitated by petitions for a declaratory order filed in 1978 by the cities of Bountiful, Utah, and Santa Clara, California, which had filed competing applications for projects owned and operated by Utah Power & Light Company and Pacific Gas & Electric Company, respectively.

There is nothing articulated in the Commission's issued documents in Merwin to indicate the basis for selecting these applications for consideration before any others, or whether the Commission's consideration resulted from such a conscious selection.

Answer 5(c): When the court decision in Merwin is issued affirming or reversing the Commission's position, the Commission will move immediately and expeditiously to carry out the court's mandate as applied to the Merwin case and other pending hydroelectric relicensing cases, absent further judicial review. In the interim period, the Commission over its objection may face a mandate by other courts to act on pending relicensing applications if an applicant is granted a petition for mandamus.

Question 6: What is the number of staff working on pending hydrolicensing applications today? Describe briefly their institutional relationship to the Hydropower Licensing Division:

(a) Considering the bulge of relicensing applications coming up in the 1990's, do you believe that you will have adequate staff resources to handle the caseload?

If not, what are your best estimates of the increases in staff and expenses that relicensing may take?

Answer 6: The offices involved in the processing of hydroelectric applications are the Office of the General Counsel (OGC) and the Office of Hydropower Licensing (OHL).

A total of 158 staff members in OHL work directly on hydroelectric applications. OHL consists of the Division of Project Management, Division of Inspections, and the Division of Environmental Analysis. The processing of applications is the responsibility of the Division of Project Management (DPM). DPM is comprised of four entities: Project Management East and West Branches, Design Review Branch, and Headwater Benefits and Power Site Lands Branch. The Project Management Branches are responsible for coordination of application processing. The Design Review Branch of DPM handles structural, comprehensive development and economic analyses, and need for power and transmission line analyses. The Division of Environmental Analysis reviews and analyzes the environmental exhibits in each application. The Division of Inspections supervises the dam safety inspection program and checks for compliance with the Commission's project orders. Legal analysis is provided by OGC, Hydroelectric Division, with a staff of 29.

In addition to OHL and OGC, other Commission offices work on various aspects of hydroelectric applications. For example, the Office of Administrative Law Judges is responsible for any formal hearing on these applications.

Answer 6(a): From 1990 to 1999, 295 applications for relicense are expected to be filed. The impending increase in relicensing responsibilities coincides with the high level of staff activity required by the "small hydro boom" -- the increase in hydropower development created by legislative incentives in the late 1970s. The workload generated from the tremendous surge in hydroelectric license and exemption applications has stretched the Commission's staff resources to their limits.

This circumstance will be exacerbated as relicensing activity increases. If an expected decrease in new capacity license applications occurs, however, the reduced backlog in these applications will moderate the impact of the relicensing workload.

Question 7: Do you believe that the annual licensing of the Commission (year-to-year licensing authority) should be continued in its present form?

Answer 7: The Commission has authority under Section 15(a) to issue annual licenses upon the expiration of an original license. This authority is only invoked when a new license cannot be issued by the expiration date of a license. The ability to issue annual licenses has provided the Commission the flexibility necessary to evaluate properly applications for new licenses in a wide variety of situations and to conduct proceedings appropriate to the circumstances of each specific project.

Question 8: 1953 Amendments: The amendments adopted in 1953 to the Federal Power Act (16 U.S.C. 828b) appear to exempt public licensees from certain parts of Section 14.

In the Commission's view, does this prevent the federal government from exercising its recapture authority?

(a) Do these provisions apply only to recapture by the U.S. Government, or also to any other entity taking over the facility? Specifically, is it your view that the new [sic] depreciated formula plus severance damages apply if the dam license were transferred to an investor-owned or public utility?

Answer 8: 16 U.S.C. § 828(b) exempts state and municipal projects from takeover by the Federal government provided for in Section 14. These projects would still be subject, however, to Federal condemnation with just compensation under eminent domain proceedings.

Answer 8(a): State and municipal licensees are not exempt from Section 15, which provides for takeover by another entity. However, Section 15 provides that the new licensee pay the original licensee what the United States is required to pay, referring to the Section 14 net investment standard. Since state and municipal licensees were exempted by the 1953 amendments from Section 14, and a Federal government takeover of a state or municipal project would require just compensation under eminent domain proceedings, it is unclear how the takeover price is to be determined.

Hydroelectric Relicensing Proceedings Involving Competing Applications
As of May 1985

Project Name and Number

- a. owner (including whether owner is a "state" or "municipality" or other
- b. rated capacity
- c. location
- d. expiration date of current license
- e. date of relicensing, if applicable
- f. competing applicant name(s) and designated FERC project number(s).

(Note: When a license expires, the project continues to operate under automatically-issued annual licenses. *See* Section 15(a), 16 U.S.C. § 808(a)).

1. Mokelumne Project No. 137

- a. Pacific Gas and Electric Company (private)
- b. 192,750 KW
- c. North Fork Mokelumne River, CA
- d. 11/23/75
- e. has not yet been relicensed
- f. The City of Santa Clara, CA (municipal) filed a competing application designated as FERC Project No. 2745.

2. Olmsted Project No. 596

- a. Utah Power and Light Company (private)
- b. 10,300 KW
- c. Provo River, Utah
- d. 10/20/75
- e. has not yet been relicensed.
- f. The City of Bountiful, Utah (municipal) and Utah Municipal Power Company (municipal) filed competing applications designated as FERC Project Nos. 4040 and 4029, respectively.

3. Rock Creek-Cresta Project No. 1962

   a. Pacific Gas and Electric Company (private)
   b. 180,900 KW
   c. North Fork Feather River, CA
   d. 9/30/82
   e. has not yet been relicensed
   f. Sacramento Municipal Utility District, Northern California Power Agency and the Cities of Anaheim, Azusa, Banning, Colton and Riverside, CA (municipal) filed a competing application designated as FERC Project No. 3223.

4. Weber Project No. 1744

   a. Utah Power and Light Company (private)
   b. 3,465 KW
   c. Weber River, Utah
   d. 6/30/70
   e. has not yet been relicensed
   f. The City of Bountiful, Utah (municipal) filed a competing application designated as FERC Project No. 2747.

5. Phoenix Project No. 1061

   a. Pacific Gas and Electric Company (private)
   b. 1,800 KW
   c. South Fork Stanislaus River, CA
   d. 12/25/80
   e. has not yet been relicensed
   f. The Tuolumne County Water District (municipal) filed a competing application designated as FERC Project No. 4309.

6. Shawano Project No. 710

   a. Wisconsin Power and Light Company (private)
   b. 640 KW
   c. Wolf River, WI
   d. 7/19/77
   e. has not yet been relicensed
   f. The City of Shawano (municipal) filed a competing application designated as FERC Project No. 2865.

7. Rush Creek Project No. 1389

   a. Southern California Edison Company (private)
   b. 8,400 KW
   c. Rush Creek, CA
   d. 11/30/86
   e. has not yet been relicensed
   f. June Lake Public Utility District (municipal) filed a competing application designated as FERC Project No. 6930.

8. Poole Project No. 1388

   a. Southern California Edison Company (private)
   b. 10,000 KW
   c. Lee Vining Creek, CA
   d. 11/30/86
   e. has not yet been relicensed
   f. City of Vernon, CA (municipal) filed a competing application designated as FERC Project No. 7263.

9. Walters Project No. 432

   a. Carolina Power and Light Company (private)
   b. 108,000 KW
   c. Pigeon River, NC
   d. 11/22/76
   e. has not yet been relicensed
   f. North Carolina Electric Membership Corporation (private) filed a competing application designated as FERC Project No. 2748.

10. Kerr Project No. 5

   a. The Montana Power Company (private)
   b. 168,000 KW
   c. Flathead River, Montana
   d. 5/22/80
   e. has not yet been relicensed
   f. The Confederated Salish and Kootenai Tribes of the Flathead Reservation (private) filed a competing application designated as FERC Project No. 2776.

11. Grandfather Falls Project No. 1966

    a. Wisconsin Public Service Company (private)
    b. 17,240 kW
    c. Wisconsin River, WI
    d. 12/31/87
    e. has not yet been relicensed
    f. The Wisconsin Public Power Inc. System (municipal) filed a competing application designated as FERC Project No. 8243.

12. Azusa Project No. 1250

    a. City of Pasadena, California (Public)
    b. 3,000 kW
    c. San Gabriel River, CA
    d. 12/31/84
    e. has not yet been relicensed
    f. The San Gabriel Hydroelectric Partnership (private) filed a competing application for exemption designated as FERC Project No. 8764.

13. Hudson Falls Project No. 5276 (Formerly Project No. 2482)

    a. Niagara Mohawk Power Corporation (Private)
    b. 7,050 kW
    c. Hudson River, NY
    d. 5/18/84
    e. has not yet been relicensed
    f. The Long Lake Energy Corporation (private) filed a competing application designated as FERC Project No. 4128.

14. South Glen Falls Project No. 5461 (Formerly Project No. 2482)

    a. Niagara Mohawk Power Corporation (Private)
    b. 12,000 kW
    c. Hudson River, NY
    d. 5/18/84
    e. has not yet been relicensed
    f. The Long Lake Energy Corporation (private) filed a competing application designated as FERC Project No. 4331.

15. Mechanicville Project No. 6032 (Formerly Project No. 2500)

    a. Niagara Mohawk Power Corporation (Private)
    b. 12,000 kW
    c. Hudson River, NY
    d. 5/18/84
    e. has not yet been relicensed
    f. The Long Lake Energy Corporation (private) and the New York State Research and Development Authority (public) filed competing applications designated as Project Nos. 4687 and 5799, respectively.

16. Oswego River Project No. 5984

a. Niagara Mohawk/City of Oswego
b. 18,000 KW
c. Oswego River, NY
d. 5/18/84
e. has not yet been relicensed
f. Carlson Leto, Inc. (private), designated as FERC Project No. 6570.

LICENSES EXPIRING PRIOR TO 1989

• LIC-EXP-DT •••	PROJ-NAME	ST	DEV-STREAM-NAME	DEV-CAP-INST	DEV-CAP-PROP	DEV-NO	PROJ-NO
• 06/30/1970	WEBER	UT	WEBER	3465		174401	1744
• 12/13/1973	WELLS RURAL	NV	TROUT CR	0		84801	848
• 06/02/1974	CUSHMAN NO 1 & NO 2	WA	SKOKOMISH N FK	81000		46001	460
• 06/12/1974	CUSHMAN NO 1 & NO 2	WA	SKOKOMISH N FK	43200		46002	460
• 06/24/1974	BEAR VALLEY & LAKE WOHLFO RD	CA	ESCONDIDO CR	1500		17601	176
• 06/24/1974	BEAR VALLEY & LAKE WOHLFO RD	CA	ESCONDIDO CR	521		17602	176
• 06/24/1974	BEAR VALLEY & LAKE WOHLFO RD	CA	ESCONDIDO CR			17603	176
• 06/16/1974	KAWEAH	CA	KAWEAH	2250		29803	298
• 06/16/1974	KAWEAH	CA	KAWEAH	1800		29801	298
• 06/16/1974	KAWEAH	CA	KAWEAH	2800		29802	298
• 10/23/1975	OLMSTED	UT	PROVO RIVER	10300		59601	596
• 11/23/1975	MOKELUMNE	CA	MOKELUMNE N FK	29700		13705	137
• 11/23/1975	MOKELUMNE	CA	MOKELUMNE N FK	9750		13704	137
• 11/23/1975	MOKELUMNE	CA	MOKELUMNE N FK	51000		13703	137
• 11/23/1975	MOKELUMNE	CA	MOKELUMNE N FK	13600		13702	137
• 11/23/1975	MOKELUMNE	CA	MOKELUMNE N FK	89100		13701	137
• 06/03/1976	GLINES CANYON	WA	ELWHA	12050		58801	588
• 06/18/1976	LOCK NO 7	KY	KENTUCKY	2040		53901	539
• 11/22/1976	WALTERS	NC	PIGEON	108000		43201	432
• 07/19/1977	SHAWANO	WI	WOLF	640		71001	710
• 10/07/1977	SAN JUAN	AK	SAN JUAN LAKE	100		225101	2251
• 10/27/1977	SKAGIT RIVER	WA	SKAGIT	150000		55301	553
• 10/27/1977	SKAGIT RIVER	WA	SKAGIT	122400		55302	553
• 10/27/1977	SKAGIT RIVER	WA	SKAGIT	360000		55303	553
• 11/06/1978	RIO BLANCO	PR	HICACO	5000		66301	663
• 05/22/1980	KERR	MT	FLATHEAD	168000		501	5
• 06/30/1980	UINTA	UT	UINTA	1200		19001	190
• 12/25/1980	PHOENIX	CA	STANISLAUS S FK	1600		106101	1061
• 09/30/1982	CRESTA & ROCK CREEK	CA	FEATHER N FK	113400		196202	1962
• 09/30/1982	CRESTA & ROCK CREEK	CA	FEATHER N FK	67400		196201	1962
• 08/23/1983	LAKE HILL	UT	COTTONWOOD CR	275		121202	1212
• 08/23/1983	LAKE HILL	UT	MISC. MOUNTAIN SPRINGS			121201	1212
• 12/06/1983	RADFORD	VA	LITTLE CR	100		123501	1235
• 05/30/1984	AZUSA	CA	SAN GABRIEL	3000		125001	1250
• 06/10/1984	TWIN FALLS	ID	SNAKE	8438		1801	18
• 12/10/1985	BUZZARD ROOST	SC	SALUDA	15000		126701	1267
• 03/31/1985	KINGS RIVER	CA	KINGS N FK	150000		198802	1988
• 03/31/1985	KINGS RIVER	CA	KINGS N FK	75000		198801	1988
• 02/28/1986	WALLOWA FALLS	OR	WALLOWA E FK	1100		30801	308
• 11/30/1986	POOLE	CA	LEEVINING CR	10000		138801	1388
• 11/30/1986	RUSH CREEK	CA	RUSH CR	8400		138901	1389
• 11/30/1986	LUNDY	CA	MILL CR	3000		139001	1390
• 11/30/1986	BISHOP CREEK	CA	BISHOP CR	21875		139401	1394
• 11/30/1986	BISHOP CREEK	CA	BISHOP CR	[illegible]		139402	1394
• 11/30/1986	BISHOP CREEK	CA	BISHOP CR	[illegible]		139404	1394
• 11/30/1986	BISHOP CREEK	CA	BISHOP CR	[illegible]		139403	1394
• 12/31/1986	TOMAHAWK	WI	WISCONSIN	2600		194001	1940
• 06/26/1987	SUTHERLAND	NE	CANAL FROM N & S PLATTE	26100		183501	1835
• 07/29/1987	CENTRAL NEBRASKA	NE	CANAL FROM PLATTE	19000		141701	1417
• 07/29/1987	CENTRAL NEBRASKA	NE	CANAL FROM PLATTE	18000		141702	1417
• 07/29/1987	CENTRAL NEBRASKA	NE	NORTH PLATTE	57000		141704	1417
• 07/29/1987	CENTRAL NEBRASKA	NE	PLATTE&CANAL FROM PLATTE	18000		141703	1417
• 12/31/1987	ASHTON & ST ANTHONY	ID	HENRYS FORK OF SNAKE RI	400		238102	2381
• 12/31/1987	WILLIAMS	ME	KENNEBEC	13000		233501	2335

•	12/31/1987	WEST BUXTON	ME	SACO	2625	253101	2531
•	12/31/1987	MILLVILLE	WV	SHENANDOAH	2940	234301	2343
•	12/31/1987	CATARACT	ME	SACO	6650	252801	2528
•	12/31/1987	ASHTON & ST ANTHONY	ID	HENRYS FORK OF SNAKE RI	5800	238101	2381
•	12/31/1987	MATTACEUNK	ME	PENOBSCOT	19200	252001	2520
•	12/31/1987	VEAZIE	ME	PENOBSCOT	8400	24[illegible]	24[illegible]
•	12/31/1987	PIEDMONT	SC	SALUDA	1000	242801	2428
•	12/31/1987	EASTMAN FALLS	NH	PEMIGEWASSET	4600	245701	2457
•	12/31/1987	GRESHAM	WI	RED	275	248401	2484
•	12/31/1987	HAWKS NEST & GLEN FERRIS	WV	KANAWHA	5450	251201	2512
•	12/31/1987	HAWKS NEST & GLEN FERRIS	WV	NEW	102000	251202	2512
•	12/31/1987	BEAVER RIVER	NY	BEAVER	1500	259301	2593
•	12/31/1987	ELLSWORTH-GRAHAM	ME	UNION		272702	2727
•	12/31/1987	ELLSWORTH-GRAHAM	ME	UNION	8900	272701	2727
•	12/31/1987	KANSAS RIVER	KS	KANSAS	1850	264401	2644
•	12/31/1987	LAMOILLE RIVER	VT	LAMOILLE	2880	220504	2205
•	12/31/1987	WEST BUXTON	ME	SACO RIVER	4000	253102	2531
•	12/31/1987	GRANDFATHER FALLS	WI	WISCONSIN	17240	196601	1966
•	12/31/1987	LAMOILLE RIVER	VT	LAMOILLE	5000	220501	2205
•	12/31/1987	LAMOILLE RIVER	VT	LAMOILLE	6000	220502	2205
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•	[illegible]/31/1988	SALMON CREEK & ANNEX CREEK	AK	SALMON CR UPPER	9500 26[illegible]	230701	2307
•	10/26/1988	EBY SPRUCE	AK	EBY SPRUCE BAY	75	143201	1432
•	10/31/1988	MENASHA	WI	FOX RIVER	250	238201	2382
•	10/31/1988	BADGER-RAPIDE CROCHE	WI	FOX	2400	267703	2677
•	10/31/1988	BADGER-RAPIDE CROCHE	WI	FOX	3600	267702	2677
•	10/31/1988	BADGER-RAPIDE CROCHE	WI	FOX	2000	267701	2677
•	12/31/1988	VICTORIA	MI	ONTONAGON		186401	1864
•	12/31/1988	VICTORIA	MI	W. BRANCH ONTONAGON	12000	186402	1864
•	12/31/1988	VICTORIA	MI	W. BRANCH ONTONAGON		186403	1864
•	12/31/1988	PENSACOLA	OK	GRAND NEOSHO	86400	149401	1494
•	12/31/1988	LYONS FALLS	NY	BLACK	2000	254802	2548
•	12/31/1988	LYONS FALLS	NY	BLACK	1150	254801	2548
•	12/31/1988	VICTORIA	MI	W. BRANCH ONTONAGON		186404	1864
•	12/31/1988	PROSPECT NO 2	O	ROGUE S FK	7200	233701	2337
•	12/31/1988	LYONS FALLS	NY	BLACK	5[illegible]90	254803	2548

HYDROELECTRIC PROJECTS UNDER LICENSE
AS OF May 16, 1985

The column headings are defined as follows:

P.N. - FERC Project Number

PROJ NAME - Project Name

OWNER - Name of Licensee

LT - License Type (3 alphanumeric characters)
- a. The first letter is an "M", "N", or "Y"
  - M - Major License (over 1,500 kW)
  - N - Minor License (up to and including 1,500 kW)
  - Y - Minor Part
- b. The second letter is an "O" indicating the license is in effect
- c. The third letter is an "N" or "P"
  - N - Non-public licensee
  - P - Public licensee (state or municipality)

INST-kW 1/ Licensed and already installed capacity in kW

AUTH-kW 1/ Licensed and under construction capacity in kW

ST State

STREAM Name of stream where project is located

ISS-DT - Date of issuance of present license

EXP-DT - Expiration date of present license (If the expiration date has passed, the project is operating under an annual license.)

An "R" in the left margin of the table indicates that the project has been relicensed

1/ Multiple entries in the INST-kW or AUTH-kW columns for any project indicate that there are multiple developments in that project. The total authorized project licensed capacity is the sum of all entries in the INST-kW and AUTH-kW columns for that project.

* P.M. ***	PROJ NAME	OWNER	IT	INST-KW	AUTH-KW	ST	STREAM	ISS DT	EXP DT
* 5	KERR	MONTANA POWER CO THE	MON	168000		MT	FLATHEAD	05/23/1930	05/22/1980
* R 13	GREEN ISLAND	NIAGARA MOHAWK POWER CORP	MON	6000		NY	HUDSON	02/07/1977	03/02/2011
* 18	TWIN FALLS	IDAHO POWER CO	MON	8438		ID	SNAKE	06/11/1934	06/10/1984
* R 20	SODA	UTAH POWER & LIGHT CO	MON	14000		ID	BEAR	07/29/1980	07/04/2003
* R 67	BIG CREEK NO 2A & 8	SOUTHERN CALIFORNIA EDISON CO	MON	58500		CA	SAN JOAQUIN	08/09/1978	02/28/2009
* 67	BIG CREEK NO 2A & 8	SOUTHERN CALIFORNIA EDISON CO	MON		200000	CA	TUNNEL NO.7	08/09/1978	02/28/2009
* 67	BIG CREEK NO 2A & 8	SOUTHERN CALIFORNIA EDISON CO	MON	80000		CA	SAN JOAQUIN	08/09/1978	02/28/2009
* R 77	POTTER VALLEY	PACIFIC GAS AND ELEC CO	MON	9040		CA	RUSSIAN E FK	10/04/1983	09/30/2033
* R 82	MITCHELL	ALABAMA POWER CO	MON	72500	97500	AL	COOSA	11/26/1975	07/31/2007
* R 96	KERCKHOFF	PACIFIC GAS AND ELEC CO	MON	34080		CA	SAN JOAQUIN	11/08/1979	11/30/2022
* 96	KERCKHOFF	PACIFIC GAS AND ELEC CO	MON	140000		CA	SAN JOAQUIN	11/08/1979	11/30/2022
* R 120	BIG CREEK NO 3&6	SOUTHERN CALIFORNIA EDISON CO	MON	141500		CA	SAN JOAQUIN	09/07/1977	02/28/2009
* R 135	OAK GROVE	PORTLAND GENERAL ELEC CO	MON	51000		OR	CLACKAMAS	04/09/1980	08/31/2006
* 137	MOKELUMNE	PACIFIC GAS AND ELEC CO	MON	89100		CA	MOKELUMNE N FK	11/24/1925	11/23/1975
* 137	MOKELUMNE	PACIFIC GAS AND ELEC CO	MON	13600		CA	MOKELUMNE N FK	11/24/1925	11/23/1975
* 137	MOKELUMNE	PACIFIC GAS AND ELEC CO	MON	51000		CA	MOKELUMNE N FK	11/24/1925	11/23/1975
* 137	MOKELUMNE	PACIFIC GAS AND ELEC CO	MON	9350		CA	MOKELUMNE N FK	11/24/1925	11/23/1975
* 137	MOKELUMNE	PACIFIC GAS AND ELEC CO	MON	29700		CA	MOKELUMNE N FK	11/24/1925	11/23/1975
* R 175	BALCH NO. 1&2	PACIFIC GAS AND ELEC CO	MON	133200		CA	KINGS N FK	04/18/1980	04/30/2026
* 176	BEAR VALLEY & LAKE WOHLFORD	ESCONDIDO MUTUAL WATER CO	MON			CA	ESCONDIDO CR	06/25/1924	06/24/1974
* 176	BEAR VALLEY & LAKE WOHLFORD	ESCONDIDO MUTUAL WATER CO	MON	520		CA	ESCONDIDO CR	06/25/1924	06/24/1974
* 176	BEAR VALLEY & LAKE WOHLFORD	ESCONDIDO MUTUAL WATER CO	MON	1500		CA	ESCONDIDO CR	06/25/1924	06/24/1974
* R 178	KERN CANYON	PACIFIC GAS AND ELEC CO	MON	8480		CA	KERN	09/07/1979	04/30/2005
* R 184	EL DORADO	PACIFIC GAS AND ELEC CO	MON	20000		CA	AMERICAN RIVER S FK	12/11/1980	02/23/2002
– * 190	UINTA	MOON LAKE ELECTRIC ASSN	MON	1200		UT	UINTA	08/07/1931	06/30/1980
* R 199	SANTEE-COOPER	SOUTH CAROLINA PUB SERV AUTH	MOP	1920		SC	SANTEE	05/09/1979	03/31/2006
* 199	SANTEE-COOPER	SOUTH CAROLINA PUB SERV AUTH	MOP	132600		SC	SANTEE&COOPER	05/09/1979	03/31/2006
* R 201	BLIND SLOUGH	PETERSBURG CITY OF	NOP	2000		AK	CRYSTAL CR	06/04/1980	11/12/2004
– * R 233	PIT	PACIFIC GAS AND ELEC CO	MON	74250		CA	PIT	02/26/1981	10/31/2003
– * 233	PIT	PACIFIC GAS AND ELEC CO	MON	140500		CA	PIT	02/26/1981	10/31/2003
* 233	PIT	PACIFIC GAS AND ELEC	MON	90000		CA	PIT	02/26/1981	10/31/2003

			CO							
*R	271	CARPENTER & REMMEL	ARKANSAS PWR AND LT CO	MON	10000		AR	OUACHITA	07/02/1980	02/28/2003
*	271	CARPENTER & REMMEL	ARKANSAS PWR AND LT CO	MON	56000		AR	OUACHITA	07/02/1989	02/28/2003
*R	287	DAYTON	HYDRO-OP ONE ASSOCIATES	MON	3680		IL	FOX	08/17/1979	04/10/2004
*R	289	OHIO FALLS	LOUISVILLE GAS AND EL CO	MON	80320		KY	OHIO	09/29/1981	11/10/2005
*	298	KAWEAH	SOUTHERN CALIFORNIA EDISON CO	YON	2250		CA	KAWEAH	08/07/1924	08/06/1974
*	298	KAWEAH	SOUTHERN CALIFORNIA EDISON CO	YON	2800		CA	KAWEAH	08/07/1924	08/06/1974
*	298	KAWEAH	SOUTHERN CALIFORNIA EDISON CO	YON	1800		CA	KAWEAH	08/07/1924	08/06/1974
*R	308	WALLOWA FALLS	PACIFIC POWER & LIGHT CO	MON	1100		OR	WALLOWA E FK	03/29/1976	02/28/1986
*R	309	PINEY	PENN ELEC CO	MON	28800		PA	CLARION	06/29/1979	10/12/2002
*R	344	SAN GORGONIO NO 1 & NO 2	SOUTHERN CALIFORNIA EDISON CO	MON	1500		CA	SAN GORGONIO CR	05/18/1983	04/26/2003
*	344	SAN GORGONIO NO 1 & NO 2	SOUTHERN CALIFORNIA EDISON CO	MON	750		CA	SAN GORGONIO CR	05/18/1983	04/26/2003
*R	346	BLANCHARD	MINNESOTA POWER & LIGHT CO	MON	12000		MN	MISSISSIPPI	05/20/1980	08/24/2003
*R	349	MARTIN DAM	ALABAMA POWER CO	MON	60000	154200	AL	TALLAPOOSA	05/11/1978	06/08/2013
*R	362	TWIN CITY	FORD MOTOR CO	MON	17900		MN	MISSISSIPPI	07/02/1980	06/06/2003
*R	372	LOWER TULE	SOUTHERN CALIFORNIA EDISON CO	MON	2000		CA	TULE	05/10/1978	06/14/2000
*R	382	BOREL	SOUTHERN CALIFORNIA EDISON CO	MON	9200		CA	KERN	09/07/1979	02/28/2005
*R	400	AMES & TACOMA	COLORADO-UTE ELE ASSN INC	MON	8000	14000	CO	ANIMAS	09/01/1981	06/30/2010
*	400	AMES & TACOMA	COLORADO-UTE ELE ASSN INC	MON	3600		CO	SAN MIGUEL LAKE FK	09/01/1981	06/30/2010
*R	401	MOTTVILLE	MICHIGAN POWER CO	MON	1680		MI	ST JOSEPH	02/28/1978	09/18/2003
*R	405	CONOWINGO	SUSQ POWER	MON	512000		MD	SUSQUEHANNA	08/14/1980	09/01/2004
*R	420	KETCHIKAN LAKES	KETCHIKAN CITY OF	MOP	4200		AK	KETCHIKAN CR	06/30/1982	06/30/2000
*	432	WALTERS	CAROLINA POWER AND LT CO	MON	108000		NC	PIGEON	11/23/1926	11/22/1976
*R	459	OSAGE	UNION ELECTRIC CO	MON	176200		MO	OSAGE	04/09/1981	02/28/2006
*	460	CUSHMAN NO 1 & NO 2	TACOMA CITY OF	YOP	81000		WA	SKOKOMISH N FK	06/03/1924	06/02/1974
*	460	CUSHMAN NO 1 & NO 2	TACOMA CITY OF	YOP	43200		WA	SKOKOMISH N FK	06/03/1924	06/02/1974
*R	469	WINTON	MINNESOTA POWER & LIGHT CO	MON	4000		MN	KAWISHIWI	03/13/1981	10/31/2003
*R	472	ONEIDA	UTAH POWER & LIGHT CO	MON	39000		ID	BEAR	05/01/1981	06/30/2000
*R	477	BULL RUN	PORTLAND GENERAL ELEC CO	MON	21000		OR	BULL RUN	05/23/1980	11/16/2004
*R	485	BARTLETTS FERRY	GEORGIA POWER CO	MON	100000	65000	GA	CHATTAHOOCHEE	04/13/1978	12/14/2014
R	487	WALLENPAUPACK	PENN POWER & LIGHT CO	MON	40000		PA	LACKAWAXEN	06/19/1980	09/30/2004
*R	503	SWAN FALLS	IDAHO POWER CO	MON	10400	14600	ID	SNAKE	12/22/1982	06/30/2010
*R	516	SALUDA	SOUTH CAROINA ELEC & GAS CO	MON	202600		SC	SALUDA	06/01/1984	08/31/2007
*	539	LOCK NO 7	KENTUCKY UTILITIES CO	MON	2040		KY	KENTUCKY	08/19/1926	08/18/1976
*	553	SKAGIT RIVER	SEATTLE DEPT OF LIGHTING	MOP	360000		WA	SKAGIT	10/28/1927	10/27/1977
*	553	SKAGIT RIVER	SEATTLE DEPT OF LIGHTING	MOP	122400		WA	SKAGIT	10/28/1927	10/27/1977

* 553	SKAGIT RIVER	SEATTLE DEPT OF LIGHTING	MOP	150000		WA	SKAGIT	10/28/1927	10/27/1977
* 588	GLINES CANYON	CROWN ZELLERBACH CORP	MON	12050		WA	ELWHA	06/04/1926	06/03/1976
* 596	OLMSTED	UTAH POWER & LIGHT CO	YON	10300		UT	PROVO RIVER	10/21/1925	10/20/1975
*R 597	STAIRS	UTAH POWER & LIGHT CO	NON	1000		UT	BIG COTTONWOOD CREEK	03/21/1977	06/30/2000
*R 606	KILARC & COW CREEK	PACIFIC GAS AND ELEC CO	MON	1440		CA	COW CREEK SOUTH	02/08/1980	03/27/2007
* 606	KILARC & COW CREEK	PACIFIC GAS AND ELEC CO	MON	3000		CA	COW CREEK OLD	02/08/1980	03/27/2007
*R 618	JORDAN	ALABAMA POWER CO	MON	100000		AL	COOSA	10/27/1980	07/31/2007
*R 619	BUCKS CREEK	PACIFIC GAS AND ELEC CO	MON	33000		CA	BUCKS & GRIZZLY CR	12/19/1974	10/31/2004
*R 620	CHIGNIK	ALASKA PACKERS ASSN INC	NON	50		AK	INDIAN CR	04/11/1979	10/04/2005
*R 632	LOWER MONROE	MONROE CITY CORP	NOP	100		UT	MONROE CR	11/21/1978	02/14/2006
*R 637	CHELAN	CHELAN COUNTY PUD NO 1	MOP	48000		WA	CHELAN	05/12/1981	03/31/2004
*R 659	CRISP COUNTY	CRISP COUNTY POWER COMM	MOP	15200		GA	FLINT	08/14/1980	08/09/2008
* 662	PINEDALE	PINEDALE POWER AND LIGHT CO	MON	0		WY	PINE CR	08/27/1943	02/11/1992
* 663	RIO BLANCO	PUERTO RICO WTR RES AUTH	MON	5000		PR	HICACO	11/07/1928	11/06/1978
*R 693	HIGHLANDS	HIGHLANDS TOWN OF	NOP	750		NC	CULLASAJA RIVER	07/29/1981	07/31/2016
*R 696	AMERICAN FORK CREEK	UTAH POWER & LIGHT CO	NON	950		UT	AMERICAN FORK CR	11/24/1975	10/31/2000
* 710	SHAWANO	WISCONSIN POWER AND LT CO	MON	640		WI	WOLF	07/20/1927	07/19/1977
*R 719	TRINITY	TWO RIVERS INC	NON	240		WA	PHELPS CR	07/18/1979	10/31/2002
*R 733	OURAY	COLORADO-UTE ELE ASSN INC	NON	432		CO	UNCOMPAHGRE	01/30/1980	04/12/2010
*R 739	CLAYTOR	APPALACHIAN POWER CO	MON	75000		VA	NEW	08/28/1980	06/30/2011
*R 785	CALKINS BRIDGE	CONSUMERS POWER CO	MON	2550		MI	KALAMAZOO	09/10/1980	04/10/2010
*R 803	DE SABLA-CENTERVILLE	PACIFIC GAS AND ELEC CO	MON	15450		CA	BUTTE CREEK	06/12/1980	10/11/2009
* 803	DE SABLA-CENTERVILLE	PACIFIC GAS AND ELEC CO	MON	6400		CA	BUTTE CREEK	06/12/1980	10/11/2009
* 803	DE SABLA-CENTERVILLE	PACIFIC GAS AND ELEC CO	MON		1660	CA	BUTTE CREEK	06/12/1980	10/11/2009
* 848	WELLS RURAL	WELLS RURAL ELECTRIC CO	YON	0		NV	TROUT CR	12/14/1928	12/13/1973
*R 906	CUSHAW RES	VIRGINIA ELECTRIC & POWER CO	MON	7500		VA	JAMES	05/30/1980	06/16/2008
*R 925	OTTUMWA	OTTUMWA CITY OF	MOP	3000		IA	DES MOINES	03/24/1982	04/30/2008
_*R 935	MERWIN	PACIFIC POWER & LIGHT CO	MON	136000		WA	LEWIS	10/06/1983	12/11/2007
*R 943	ROCK ISLAND	CHELAN COUNTY PUD NO 1	MOP	622500		WA	COLUMBIA	05/13/1981	01/31/2020
*R 946	HYRUM	HYRUM CITY CORP	NOP	400		UT	BLACKSMITH FORK	03/03/1981	04/30/2008
*R 1005	BOULDER CANYON	PUBLIC SERVICE CO OF COLO	MON	20000		CO	BOULDER CR MIDDLE	04/28/1981	08/31/2009
*R 1025	SAFE HARBOR	SAFE HARBOR WTR PWR CORP	MON	417500	187500	PA	SUSQUEHANNA	08/14/1980	04/22/2030
=*R 1051	SKAGWAY DEWEY	ALASKA POWER & TEL CO	NON	340		AK	DEWEY LAKES	04/30/1980	08/29/2007
* 1061	PHOENIX	PACIFIC GAS AND ELEC CO	YON	1800		CA	STANISLAUS S FK	12/26/1930	12/25/1980

*R1121	MILLSEAT CREEK & BATTLE CREEK	PACIFIC GAS AND ELEC CO	MON	12150	CA	BATTLE CR	08/13/1976	07/31/2026
* 1121	MILLSEAT CREEK & BATTLE CREEK	PACIFIC GAS AND ELEC CO	MON	7650	CA	BATTLE CR S FK	08/13/1976	07/31/2026
* 1121	MILLSEAT CREEK & BATTLE CREEK	PACIFIC GAS AND ELEC CO	MON	6750	CA	BATTLE CR S FK	08/13/1976	07/31/2026
* 1121	MILLSEAT CREEK & BATTLE CREEK	PACIFIC GAS AND ELEC CO	MON	9550	CA	MILLSEAT CR	08/13/1976	07/31/2026
*R1175	LONDON & MARMET	KANAWHA VALLEY POWER CO	MON	14400	WV	KANAWHA	09/23/1983	01/31/2014
* 1175	LONDON & MARMET	KANAWHA VALLEY POWER CO	MON	14400	WV	KANAWHA	09/23/1983	01/31/2014
* 1212	LAKE HILL	EPHRAIM CITY OF	NOP	0	UT	MISC. MOUNTAIN SPRINGS	08/24/1933	08/23/1983
* 1212	LAKE HILL	EPHRAIM CITY OF	NOP	205	UT	COTTONWOOD CR	08/24/1933	08/23/1983
*R1218	FLINT RIVER RESERVOIR	GEORGIA POWER CO	MON	5400	GA	FLINT	12/27/1979	09/30/2001
* 1235	RADFORD	RADFORD CITY OF	NOP	800	VA	LITTLE CR	12/07/1933	12/06/1983
* 1250	AZUSA	PASADENA CITY OF	MOP	3000	CA	SAN GABRIEL	05/18/1934	05/30/1984
*R1256	COLUMBUS & MONROE	LOUP RIVER PUB PWR DIST	MOP	7200	NE	LOUP & CANAL FROM LOUP	12/29/1982	04/15/2014
* 1256	COLUMBUS & MONROE	LOUP RIVER PUB PWR DIST	MOP	40500	NE	LOUP & CANAL FROM LOUP	12/29/1982	04/15/2014
* 1267	BUZZARD ROOST	DUKE POWER CO	MON	15000	SC	SALUDA	02/11/1935	02/10/1985
*R1273	PAROWAN	PAROWAN CITY CORPORATION	NOP	600	UT	CENTER CR	09/15/1977	12/30/2004
*R1290	WINFIELD	KANAWHA VALLEY POWER CO	MON	14760	WV	KANAWHA	09/26/1983	01/31/2014
* 1333	TULE RIVER	PACIFIC GAS AND ELEC CO	MON	4800	CA	TULE N FK & M FK	05/01/1939	04/30/1989
* 1354	CRANE VALLEY	PACIFIC GAS AND ELEC CO	MON	3220	CA	WILLOW CR N FK	05/01/1939	04/30/1989
* 1354	CRANE VALLEY	PACIFIC GAS AND ELEC CO	MON	340	CA	WILLOW CR N FK	05/01/1939	04/30/1989
* 1354	CRANE VALLEY	PACIFIC GAS AND ELEC CO	MON	2880	CA	WILLOW CR N FK	05/01/1939	04/30/1989
* 1354	CRANE VALLEY	PACIFIC GAS AND ELEC CO	MON	4000	CA	WILLOW CR N FK	05/01/1939	04/30/1989
* 1354	CRANE VALLEY	PACIFIC GAS AND ELEC CO	MON	880	CA	WILLOW CR N FK	05/01/1939	04/30/1989
* 1388	POOLE	SOUTHERN CALIFORNIA EDISON CO	MON	10000	CA	LEEVINING CR	08/25/1939	11/30/1986
* 1389	RUSH CREEK	SOUTHERN CALIFORNIA EDISON CO	MON	8400	CA	RUSH CR	05/01/1939	11/30/1986
* 1390	LUNDY	SOUTHERN CALIFORNIA EDISON CO	MON	3000	CA	MILL CR	10/02/1939	11/30/1986
* 1394	BISHOP CREEK	SOUTHERN CALIFORNIA EDISON CO	MON	21875	CA	BISHOP CR	09/03/1940	11/30/1986
* 1394	BISHOP CREEK	SOUTHERN CALIFORNIA EDISON CO	MON	0	CA	BISHOP CR	09/03/1940	11/30/1986
* 1394	BISHOP CREEK	SOUTHERN CALIFORNIA EDISON CO	MON	0	CA	BISHOP CR	09/03/1940	11/30/1986
* 1394	BISHOP CREEK	SOUTHERN CALIFORNIA EDISON CO	MON	0	CA	BISHOP CR	09/03/1940	11/30/1986
* 1403	NARROWS	PACIFIC GAS AND ELEC CO	MON	9350	CA	YUBA	08/01/1941	07/31/1991
*R1413	PONDS LODGE	ISLAND PARK RESORTS INC	NON	200	ID	BUFFALO	03/14/1980	10/31/2004
* 1417	CENTRAL NEBRASKA	CENTRAL NEB PUB PWR & I D	MOP	50000	NE	NORTH PLATTE	07/30/1937	07/29/1987

* 1417	CENTRAL NEBRASKA	CENTRAL NEB PUB PWR & I D	MOP	18000		NE	PLATTE&CANAL FROM PLATTE	07/30/1937	07/29/1987
* 1417	CENTRAL NEBRASKA	CENTRAL NEB PUB PWR & I D	MOP	18000		NE	CANAL FROM PLATTE	07/30/1937	07/29/1987
* 1417	CENTRAL NEBRASKA	CENTRAL NEB PUB PWR & I D	MOP	18000		NE	CANAL FROM PLATTE	07/30/1937	07/29/1987
* 1432	DRY SPRUCE	C W C FISHERIES	NON	75		AK	DRY SPRUCE BAY	05/20/1971	10/26/1988
* 1473	FLINT CREEK	MONTANA POWER CO THE	MON	1100		MT	FLINT CR	09/03/1940	06/30/1988
* 1490	MORRIS SHEPPARD	BRAZOS RIVER AUTHORITY	MOP	22500		TX	BRAZOS	05/25/1938	05/24/1988
* 1494	PENSACOLA	GRAND RIVER DAM AUTHORITY	MOP	86400		OK	GRAND NEOSHO	07/26/1939	12/31/1988
* 1510	KAUKAUNA	KAUKAUNA CITY OF	MOP	4800		WI	FOX	04/01/1939	03/31/1989
* 1517	UPPER MONROE	MONROE CITY CORP	NOP	125		UT	MONROE CR	07/01/1940	06/30/1990
* ✓1553	FALLS CREEK	NEW JERSEY ZINC CO	NON	330		CO	FALL CR	07/13/1977	06/27/2000
* 1574	MOUNTAIN SPRINGS	MANTI CITY LIGHT & POWER	MOP	400		UT	MANTI CR	09/03/1940	09/02/1990
* 1651	SWIFT CREEK	LOWER VALLEY PWR AND LT CO	MON	0	750	WY	SWIFT CR	12/01/1942	11/30/1992
* 1651	SWIFT CREEK	LOWER VALLEY PWR AND LT CO	MON	0	800	WY	SWIFT CR	12/01/1942	11/30/1992
* 1715	SPRING CREEK	SPRINGVILLE CITY OF	YOP	100		UT	SPRING CREEK	06/23/1941	06/22/1991
* 1744	WEBER	UTAH POWER & LIGHT CO	MON	3465		UT	WEBER	05/14/1948	06/30/1970
* 1746	LEIDY CREEK	CORD VIRGINIA KIRK	NON	200		NV	LEIDY CR	05/16/1966	09/30/1991
* ✓1759	MICHIGAMME	WISCONSIN ELECTRIC PWR CO	MON	1800		MI	MICHIGAMME	11/05/1974	12/31/2001
* 1759	MICHIGAMME	WISCONSIN ELECTRIC PWR CO	MON	6140		MI	MENOMINEE	11/05/1974	12/31/2001
* 1759	MICHIGAMME	WISCONSIN ELECTRIC PWR CO	MON	15000		MI	MICHIGAMME	11/05/1974	12/31/2001
* 1773	YELLOWSTONE	MOON LAKE ELECTRIC ASSN	MON	900		UT	YELLOWSTONE CR	04/01/1943	03/31/1993
* 1835	SUTHERLAND	NEBRASKA PUB PWR DIST	MOP	26100		NE	CANAL FROM N & S PLATTE	04/13/1943	06/30/1987
* ✓1855	BELLOWS FALLS	NEW ENGLAND POWER CO	MON	40800		NH	CONNECTICUT	08/03/1979	04/30/2018
* 1858	BEAVER CITY	BEAVER CITY CORPORATION	MOP	625		UT	BEAVER	07/31/1943	07/30/1993
* 1862	NISQUALLY RIVER	TACOMA CITY OF	MOP	64000		WA	NISQUALLY	11/27/1944	12/31/1993
* 1862	NISQUALLY RIVER	TACOMA CITY OF	MOP	50000		WA	NISQUALLY	11/27/1944	12/31/1993
* 1864	VICTORIA	UPPER PENINSULA POWER CO	MON			MI	S. BRANCH ONTONAGON	10/05/1953	12/31/1988
* 1864	VICTORIA	UPPER PENINSULA POWER CO	MON			MI	W. BRANCH ONTONAGON	10/05/1953	12/31/1988
* 1864	VICTORIA	UPPER PENINSULA POWER CO	MON	12000		MI	W. BRANCH ONTONAGON	10/05/1953	12/31/1988
* 1864	VICTORIA	UPPER PENINSULA POWER CO	MON	0		MI	ONTONAGON	10/05/1953	12/31/1988
– ✓1869	THOMPSON FALLS	MONTANA POWER CO THE	MON	30000		MT	CLARK FK	12/28/1979	12/31/2015
✓1881	HOLTWOOD	PENN POWER & LIGHT CO	MON	107200		PA	SUSQUEHANNA	08/14/1980	09/01/2004
✓1888	YORKHAVEN	METROPOLITAN EDISON CO	MON	19600		PA	SUSQUEHANNA	08/14/1980	09/01/2004
✓1889	TURNERS FALLS	WESTERN MASS ELECTRIC CO	MON	51000		MA	CONNECTICUT RIVER	05/05/1980	04/30/2018
– * 1889	TURNERS FALLS	WESTERN MASS ELECTRIC CO	MON	4840		MA	CONNECTICUT CANAL	05/05/1980	04/30/2018
* ✓1892	WILDER	NEW ENGLAND POWER CO	MON	32400		NH	CONNECTICUT	12/10/1979	04/30/2018
* ✓1893	MERRIMACK RIVER	PUBLIC SERVICE CO OF N H	MON	5600	5900	NH	MERRIMACK RIVER	05/08/1980	12/31/2005

* 1893	MERRIMACK RIVER	PUBLIC SERVICE CO OF N H	MON	1600	NH	MERRIMACK RIVER	05/08/1980	12/31/2005
* 1893	MERRIMACK RIVER	PUBLIC SERVICE CO OF N H	MON	16000	NH	MERRIMACK	05/08/1980	12/31/2005
1894	PARR SHOALS	SOUTH CAROLINA ELEC & GAS CO	MON	518400	SC	BROAD	08/28/1974	06/30/2020
* 1894	PARR SHOALS	SOUTH CAROLINA ELEC & GAS CO	MON	14820	SC	BROAD	08/28/1974	06/30/2020
1895	COLUMBIA	SOUTH CAROLINA ELEC & GAS	MON	10600	SC	BROAD	04/28/1980	06/30/2000
1904	VERNON	NEW ENGLAND POWER CO	MON	24400	NH	CONNECTICUT	06/25/1979	04/30/2018
* 1922	BEAVER FALLS CREEK	KETCHIKAN CITY OF	MOP	2100	AK	SILVIS LAKE	05/01/1945	04/30/1995
* 1922	BEAVER FALLS CREEK	KETCHIKAN CITY OF	MOP	4400	AK	SILVIS LAKE	05/01/1945	04/30/1995
* 1922	BEAVER FALLS CREEK	KETCHIKAN CITY OF	MOP	1200	AK	SILVIS LAKE	05/01/1945	04/30/1995
* 1927	NORTH UMPQUA	PACIFIC POWER & LIGHT CO	MON	0	OR	NORTH UMPQUA	01/30/1947	01/29/1997
* 1927	NORTH UMPQUA	PACIFIC POWER & LIGHT CO	MON	33000	OR	NORTH UMPQUA	01/30/1947	01/29/1997
* 1927	NORTH UMPQUA	PACIFIC POWER & LIGHT CO	MON	15000	OR	CLEARWATER	01/30/1947	01/29/1997
* 1927	NORTH UMPQUA	PACIFIC POWER & LIGHT CO	MON	26000	OR	CLEARWATER	01/30/1947	01/29/1997
* 1927	NORTH UMPQUA	PACIFIC POWER & LIGHT CO	MON	42501	OR	NORTH UMPQUA	01/30/1947	01/29/1997
* 1927	NORTH UMPQUA	PACIFIC POWER & LIGHT CO	MON	11000	OR	NORTH UMPQUA	01/30/1947	01/29/1997
* 1927	NORTH UMPQUA	PACIFIC POWER & LIGHT CO	MON	11250	OR	NORTH UMPQUA	01/30/1947	01/29/1997
* 1927	NORTH UMPQUA	PACIFIC POWER & LIGHT CO	MON	18000	OR	NORTH UMPQUA	01/30/1947	01/29/1997
* 1930	KERN RIVER NO 1	SOUTHERN CALIFORNIA EDISON CO	MON	24992	CA	KERN	06/01/1950	04/30/1996
* 1932	LYTLE CREEK	SOUTHERN CALIFORNIA EDISON CO	MON	400	CA	LYTLE CR	08/09/1946	04/30/1996
* 1933	SANTA ANA NO 1 & NO 2	SOUTHERN CALIFORNIA EDISON CO	MON	800	CA	SANTA ANA	01/03/1947	04/30/1996
* 1933	SANTA ANA NO 1 & NO 2	SOUTHERN CALIFORNIA EDISON CO	MON	3200	CA	SANTA ANA	01/03/1947	04/30/1996
* 1934	MILL CREEK NO 2 & NO 3	SOUTHERN CALIFORNIA EDISON CO	MON	200	CA	MILL CR	08/09/1946	04/30/1996
* 1934	MILL CREEK NO 2 & NO 3	SOUTHERN CALIFORNIA EDISON CO	MON	1800	CA	MILL CR	08/09/1946	04/30/1996
* 1940	TOMAHAWK	WISCONSIN PUB SERV CORP	MON	2600	WI	WISCONSIN	09/29/1948	12/31/1986
* 1951	SINCLAIR	GEORGIA POWER CO	MON	45000	GA	OCONEE	06/01/1948	08/31/1997
• 1952	EAGLE PASS	MAVERICK CO W C I D NO1	MOP	0	TX	RIO GRANDE	10/24/1958	06/30/1996
* 1953	DU BAY	CONSOLIDATED WATER PWR CO	MON	7200	WI	WISCONSIN	02/04/1952	06/30/1991
1957	OTTER RAPIDS	WISCONSIN PUB SERV CORP	MON	700	WI	WISCONSIN	08/08/1975	06/30/1990
* 1960	FLAMBEAU	DAIRYLAND POWER COOP	MON	15000	WI	FLAMBEAU	03/14/1951	02/28/2001
* 1962	CRESTA & ROCK CREEK	PACIFIC GAS AND ELEC CO	MON	67400	CA	FEATHER N FK	10/01/1947	09/30/1982
* 1962	CRESTA & ROCK CREEK	PACIFIC GAS AND ELEC CO	MON	113400	CA	FEATHER N FK	10/01/1947	09/30/1982
* 1966	GRANDFATHER FALLS	WISCONSIN PUB SERV CORP	MON	17240	WI	WISCONSIN	02/20/1951	12/31/1987
1967	WHITING&PLOVER	KIMBERLY-CLARK CORP	MON	600	WI	WISCONSIN	10/23/1974	06/30/1990
* 1971	HELLS CANYON	IDAHO POWER CO	MON	585000	ID	SNAKE	08/04/1955	07/31/2005

* 1971	HELLS CANYON	IDAHO POWER CO	MON	190000	ID	SNAKE	08/04/1955	07/31/2005
* 1971	HELLS CANYON	IDAHO POWER CO	MON	391500	ID	SNAKE	08/04/1955	07/31/2005
* 1975	BLISS	IDAHO POWER CO	MON	69000	ID	SNAKE	03/01/1948	02/28/1998
*R1979	ALEXANDER	WISCONSIN PUB SERV CORP	MON	4200	WI	WISCONSIN	04/15/1985	06/30/2004
* 1980	BIG QUINNESEC FALLS	WISCONSIN ELECTRIC PWR CO	MON	22700	MI	MENOMINEE	11/04/1949	02/28/1998
* 1981	STILES	OCONTO ELECTRIC COOP	MON	1000	WI	OCONTO	03/13/1915	02/28/2000
* 1982	HOLCOMBE	NORTHERN STATES POWER CO	MON	34000	WI	CHIPPEWA	05/19/1950	06/30/1998
* 1984	PETENWELL-CASTLE ROCK	WISCONSIN RIVER POWER CO	MON	15000	WI	WISCONSIN	12/12/1950	01/31/1998
* 1984	PETENWELL-CASTLE ROCK	WISCONSIN RIVER POWER CO	MON	20000	WI	WISCONSIN	12/12/1950	01/31/1998
* 1986	ROCK CREEK	CALIF PACIFIC UTIL CO	NON	800	OR	ROCK CR	06/26/1951	06/29/1996
* 1988	KINGS RIVER	PACIFIC GAS AND ELEC CO	MON	150000	CA	KINGS N FK	04/28/1955	03/31/1985
* 1988	KINGS RIVER	PACIFIC GAS AND ELEC CO	MON	75000	CA	KINGS N FK	04/28/1955	03/31/1985
* 1991	MOYIE NO 1 & 2	BONNERS FERRY CITY OF	MOP	3938	ID	MOYIE	04/05/1950	03/31/1998
* 1992	FIRE MOUNTAIN LODGE	TOWNSEND DONALD R	NON	15	CA	FERN SPRINGS	05/06/1980	04/30/2010
* 1994	SNAKE CREEK	HEBER LIGHT AND PWR PLANT	MOP	750	UT	SNAKE CR	12/29/1949	06/30/1998
*1999	WAUSAU	WISCONSIN PUB SERV CORP	MON	5400	WI	WISCONSIN	04/02/1975	06/30/1995
* 2000	ROBERT MOSES	POWER AUTHORITY OF THE STATE OF NY	MOP	912000	NY	ST LAWRENCE	07/15/1953	10/31/2003
* 2004	CONNECTICUT CANAL	HOLYOKE WATER POWER CO	MON	1600	MA	CONNECTICUT CANAL	09/09/1949	08/31/1999
* 2004	CONNECTICUT CANAL	HOLYOKE WATER POWER CO	MON	225	MA	CONNECTICUT CANAL	09/09/1949	08/31/1999
* 2004	CONNECTICUT CANAL	HOLYOKE WATER POWER CO	MON	2960	MA	CONNECTICUT CANAL	09/09/1949	08/31/1999
* 2004	CONNECTICUT CANAL	HOLYOKE WATER POWER CO	MON	30000	MA	CONNECTICUT	09/09/1949	08/31/1999
* 2004	CONNECTICUT CANAL	HOLYOKE WATER POWER CO	MON	500	MA	CONNECTICUT CANAL	09/09/1949	08/31/1999
* 2004	CONNECTICUT CANAL	HOLYOKE WATER POWER CO	MON	7640	MA	CONNECTICUT CANAL	09/09/1949	08/31/1999
* 2005	DONNELLS & BEARDSLEY	OAKDALE & SOUTH SAN JOAQUIN I D S	MOP	9990	CA	STANISLAUS M FK	05/03/1950	12/31/2004
* 2005	DONNELLS & BEARDSLEY	OAKDALE & SOUTH SAN JOAQUIN I D S	MOP	54000	CA	STANISLAUS M FK	05/03/1950	12/31/2004
* 2009	GASTON & ROANOKE RAPIDS	VIRGINIA ELECTRIC & POWER CO	MON	100000	NC	ROANOKE	02/01/1951	01/31/2001
* 2009	GASTON & ROANOKE RAPIDS	VIRGINIA ELECTRIC & POWER CO	MON	177920	NC	ROANOKE	02/01/1951	01/31/2001
* 2016	MAYFIELD & MOSSYROCK	TACOMA CITY OF	MOP	160000	WA	COWLITZ	11/27/1951	12/31/2001
* 2016	MAYFIELD & MOSSYROCK	TACOMA CITY OF	MOP	300000	WA	COWLITZ	11/27/1951	12/31/2001
* 2017	BIG CREEK NO 4	SOUTHERN CALIFORNIA EDISON CO	MON	84000	CA	SAN JOAQUIN	12/23/1949	02/28/1999
* 2019	MURPHYS	PACIFIC GAS AND ELEC CO	MON	3600	CA	STANSLS N FK DIV	11/06/1946	11/05/1996
* 2030	ROUND BUTTE & PELTON	PORTLAND GENERAL ELEC CO	MON	123000	OR	DESCHUTES	01/01/1952	12/31/2001
* 2030	ROUND BUTTE & PELTON	PORTLAND GENERAL ELEC CO	MON	15000	OR	DESCHUTES RIVER	01/01/1952	12/31/2001
* 2030	ROUND BUTTE & PELTON	PORTLAND GENERAL ELE	MON	247050	OR	DESCHUTES	01/01/1952	12/31/2001

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* 2031	BARTHOLOMEW SPRINGS	SPRINGVILLE CITY OF	YOP	500		UT	BARTHOLOMEW CR	10/01/1952	09/30/2002
* 2032	STRAWBERRY CREEK	LOWER VALLEY PWR AND LT CO	MON	1500		WY	STRAWBERRY CR	05/11/1951	09/30/1999
* 2035	GROSS DAM	DENVER CITY & COUNTY OF	MOP	0		CO	BOULDER CR SOUTH	05/01/1950	04/30/2000
* 2042	BOX CANYON	PEND OREILLE PUD NO 1	MOP	60000		WA	PEND OREILLE	02/05/1952	01/31/2002
* 2047	STEWARTS BRIDGE	NIAGARA MOHAWK POWER CORP	MON	30000		NY	SACANDAGA	06/30/1950	05/31/2000
* 2055	C J STRIKE	IDAHO POWER CO	MON	82500		ID	SNAKE	02/06/1951	11/30/2000
* 2056	ST ANTHONY FALLS	NORTHERN STATES POWER CO	MON	8000		MN	MISSISSIPPI	09/06/1951	12/31/2000
* 2056	ST ANTHONY FALLS	NORTHERN STATES POWER CO	MON	12400		MN	MISSISSIPPI	09/06/1951	12/31/2000
* 2058	CABINET GORGE	WASHINGTON WATER PWR CO	MON	200000		ID	CLARK FORK	01/10/1951	01/09/2001
* 2060	CARRY FALLS RES	NIAGARA MOHAWK POWER CORP	MON	0		NY	RAQUETTE	02/02/1951	01/31/2001
* 2061	LOWER SALMON	IDAHO POWER CO	MON	60000		ID	SNAKE	10/23/1951	12/23/1997
* 2062	ENLOE	OKANAGAN COUNTY P U D	MOP		3720	WA	SIMILKAMEEN RIVER	03/03/1983	02/28/2023
* 2064	WINTER	NORTH CENTRAL POWER CO	MON	625		WI	CHIPPEWA E FK	11/19/1951	11/30/2001
* 2067	TULLOCH	OAKDALE & SOUTH SAN JOAQUIN I D S	MOP	17100		CA	STANISLAUS	08/21/1951	12/31/2004
* 2069	IRVING & CHILDS	LINCOLN NATL LIFE INS CO	MON	5400		AZ	FOSSIL CR	01/01/1945	12/31/1994
* 2069	IRVING & CHILDS	LINCOLN NATL LIFE INS CO	MON	1600		AZ	FOSSIL CR	01/01/1945	12/31/1994
* 2071	YALE	PACIFIC POWER & LIGHT CO	MON	108000		WA	LEWIS	04/25/1951	04/30/2001
* 2072	LOWER PAINT	WISCONSIN ELECTRIC PWR CO	MON	100		MI	PAINT	12/29/1951	12/31/2001
* 2073	MICHIGAMME FALLS	WISCONSIN ELECTRIC PWR CO	MON	9600		MI	MICHIGAMME	10/02/1951	10/31/2001
* 2074	HEMLOCK FALLS	WISCONSIN ELECTRIC PWR CO	MON	2800		MI	MICHIGAMME	10/09/1951	10/31/2001
* 2075	NOXON RAPIDS	WASHINGTON WATER PWR CO	MON	396880		MT	CLARK FK	05/12/1955	04/30/2005
* 2077	FIFTEEN MILE FALL	NEW ENGLAND POWER CO	MON	140400		NH	CONNECTICUT	01/25/1952	07/31/2001
* 2077	FIFTEEN MILE FALL	NEW ENGLAND POWER CO	MON	140400		NH	CONNECTICUT	01/25/1952	07/31/2001
* 2077	FIFTEEN MILE FALL	NEW ENGLAND POWER CO	MON	10560		NH	CONNECTICUT	01/25/1952	07/31/2001
* 2079	MIDDLE FORK AMERICAN RIVER	PLACER CO WATER AGENCY	MOP	6570		CA	AMERICAN M FK	03/01/1963	02/28/2013
- 2079	MIDDLE FORK AMERICAN RIVER	PLACER CO WATER AGENCY	MOP	79200		CA	AMERICAN M FK	03/01/1963	02/28/2013
* 2079	MIDDLE FORK AMERICAN RIVER	PLACER CO WATER AGENCY	MOP	15300		CA	AMERICAN M FK	03/01/1963	02/28/2013
* 2079	MIDDLE FORK AMERICAN RIVER	PLACER CO WATER AGENCY	MOP	110525		CA	RUBICON	03/01/1963	02/28/2013
* 2082	KLAMATH	PACIFIC POWER & LIGHT CO	MON	3200		OR	LINK	01/28/1954	02/28/2006
* 2082	KLAMATH	PACIFIC POWER & LIGHT CO	MON	600		OR	LINK	01/28/1954	02/28/2006
* 2082	KLAMATH	PACIFIC POWER & LIGHT CO	MON	0		OR	KLAMATH	01/28/1954	02/28/2006
* 2082	KLAMATH	PACIFIC POWER & LIGHT CO	MON	80000		OR	KLAMATH	01/28/1954	02/28/2006
* 2082	KLAMATH	PACIFIC POWER & LIGH	MON	20000		OR	KLAMATH	01/28/1954	02/28/2006

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*	2082	KLAMATH	PACIFIC POWER & LIGHT CO	MON	27000		OR	KLAMATH	01/28/1954	02/28/2006
*	2082	KLAMATH	PACIFIC POWER & LIGHT CO	MON	2200		OR	FALL CR	01/28/1954	02/28/2006
*	2082	KLAMATH	PACIFIC POWER & LIGHT CO	MON	18000		OR	KLAMATH	01/28/1954	02/28/2006
*	2084	RAQUETTE	NIAGARA MOHAWK POWER CO	MON	22500		NY	RAQUETTE	01/31/1952	01/31/2002
*	2084	RAQUETTE	NIAGARA MOHAWK POWER CO	MON	14400		NY	RAQUETTE	01/31/1952	01/31/2002
*	2084	RAQUETTE	NIAGARA MOHAWK POWER CO	MON	22500		NY	RAQUETTE	01/31/1952	01/31/2002
*	2084	RAQUETTE	NIAGARA MOHAWK POWER CO	MON	22500		NY	RAQUETTE	01/31/1952	01/31/2002
*	2084	RAQUETTE	NIAGARA MOHAWK POWER CO	MON	19350		NY	RAQUETTE	01/31/1952	01/31/2002
*	2085	MAMMOTH POOL	SOUTHERN CALIFORNIA EDISON CO	MON	129360		CA	SAN JOAQUIN	12/30/1957	11/30/2007
*	2085	MAMMOTH POOL	SOUTHERN CALIFORNIA EDISON CO	MON		4000	CA	SAN JOAQUIN RIVER	12/30/1957	11/30/2007
*	2086	LAKE THOMAS A. EDISON	SOUTHERN CALIFORNIA EDISON CO	MON	0		CA	MONO CR	09/29/1953	08/31/2003
*	2088	SOUTH FORK	OROVILLE WYANDOTTE I D S	MOP			CA		07/17/1952	03/31/2009
*	2088	SOUTH FORK	OROVILLE WYANDOTTE I D S	MOP		13200	CA	S FK FEATHER	07/17/1952	03/31/2009
*	2088	SOUTH FORK	OROVILLE WYANDOTTE I D S	MOP	52200		CA	FEATHER S FK	07/17/1952	03/31/2009
*	2088	SOUTH FORK	OROVILLE WYANDOTTE I D S	MOP	28800		CA	FEATHER S FK	07/17/1952	03/31/2009
*	2088	SOUTH FORK	OROVILLE WYANDOTTE I D S	MOP	9900		CA	FEATHER S FK	07/17/1952	03/31/2009
*	2090	WATERBURY NO 22	GREEN MOUNTAIN POWER CORP	MON	5520		VT	WATERBURY	07/20/1954	08/31/2001
*	2100	FEATHER RIVER	CALIFORNIA DEPT OF WATER RESOURCES	MOP		3000	CA	FEATHER RIVER	02/11/1957	01/31/2007
*	2100	FEATHER RIVER	CALIFORNIA DEPT OF WATER RESOURCES	MOP	644250	500	CA	FEATHER	02/11/1957	01/31/2007
*	2100	FEATHER RIVER	CALIFORNIA DEPT OF WATER RESOURCES	MOP	115100		CA	FEATHER	02/11/1957	01/31/2007
*	2101	UPPER AMERICAN RIVER	SACRAMENTO M U D	MOP	74100		CA	GERLE CR	08/01/1957	07/31/2007
*	2101	UPPER AMERICAN RIVER	SACRAMENTO M U D	MOP	23750		CA	AMERICAN S FK	08/01/1957	07/31/2007
*	2101	UPPER AMERICAN RIVER	SACRAMENTO M U D	MOP	33250		CA	SILVER CR	08/01/1957	07/31/2007
*	2101	UPPER AMERICAN RIVER	SACRAMENTO M U D	MOP	133000		CA	SILVER CR	08/01/1957	07/31/2007
*	2101	UPPER AMERICAN RIVER	SACRAMENTO M U D	MOP	190400		CA	SILVER CREEK	08/01/1957	07/31/2007
*	2101	UPPER AMERICAN RIVER	SACRAMENTO M U D	MOP	142500		CA	SILVER CR	08/01/1957	07/31/2007
*	2101	UPPER AMERICAN RIVER	SACRAMENTO M U D	MOP		10000	CA	SOUTH FORK SILVER CREEK	08/01/1957	07/31/2007
*	2103	WANETA	COMINCO AMERICAN CO	YON	0		WA	CEDAR CREEK	08/05/1952	07/31/2002
*	2105	UPPER NO. FORK FEATHER RIVER	PACIFIC GAS AND ELEC CO	MON	117900		CA	NORTH FORK FEATHER RIVER	01/24/1955	10/31/2004
*	2105	UPPER NO. FORK FEATHER RIVER	PACIFIC GAS AND ELEC CO	MON		1300	CA	NORTH FORK FEATHER RIVER	01/24/1955	10/31/2004
*	2105	UPPER NO. FORK FEATHER RIVER	PACIFIC GAS AND ELEC CO	MON	36000		CA	BUTT CREEK	01/24/1955	10/31/2004
*	2105	UPPER NO. FORK FEATHER RIVER	PACIFIC GAS AND ELEC CO	MON	75000		CA	FEATHER N FK	01/24/1955	10/31/2004
*	2105	UPPER NO. FORK FEATHER RIVER	PACIFIC GAS AND ELEC CO	MON	109800		CA	FEATHER N FK	01/24/1955	10/31/2004

* 2106	MCCLOUD-PIT	PACIFIC GAS AND ELEC CO	MON	104400	CA	PIT	08/18/1961	07/31/2011
* 2106	MCCLOUD-PIT	PACIFIC GAS AND ELEC CO	MON	79200	CA	PIT	08/18/1961	07/31/2011
* 2106	MCCLOUD-PIT	PACIFIC GAS AND ELEC CO	MON	154800	CA	MCCLOUD & IRON CANYON CR	08/18/1961	07/31/2011
* 2107	POE	PACIFIC GAS AND ELEC CO	MON	142830	CA	FEATHER N FK	10/26/1953	09/30/2003
2110	STEVENS POINT	CONSOLIDATED WATER PWR CO	MON	3840	WI	WISCONSIN	01/17/1977	06/30/2000
* 2111	SWIFT NO 1	PACIFIC POWER & LIGHT CO	MON	204000	WA	LEWIS	12/29/1956	04/30/2006
* 2113	WISCONSIN VALLEY	WIS VALLEY IMPROVEMENT CO	MON	0	WI	ST GERMAIN	05/28/1959	07/31/1993
* 2113	WISCONSIN VALLEY	WIS VALLEY IMPROVEMENT CO	MON	0	WI	WISCONSIN	05/28/1959	07/31/1993
* 2113	WISCONSIN VALLEY	WIS VALLEY IMPROVEMENT CO	MON	0	WI	NORTH PELICAN	05/28/1959	07/31/1993
* 2113	WISCONSIN VALLEY	WIS VALLEY IMPROVEMENT CO	MON	0	WI	PELICAN	05/28/1959	07/31/1993
* 2113	WISCONSIN VALLEY	WIS VALLEY IMPROVEMENT CO	MON	0	WI	TOMAHAWK	05/28/1959	07/31/1993
* 2113	WISCONSIN VALLEY	WIS VALLEY IMPROVEMENT CO	MON	0	WI	SQUIRREL	05/28/1959	07/31/1993
* 2113	WISCONSIN VALLEY	WIS VALLEY IMPROVEMENT CO	MON	0	WI	TOMAHAWK	05/28/1959	07/31/1993
* 2113	WISCONSIN VALLEY	WIS VALLEY IMPROVEMENT CO	MON	0	WI	SPIRIT	05/28/1959	07/31/1993
* 2113	WISCONSIN VALLEY	WIS VALLEY IMPROVEMENT CO	MON	0	WI	BIG EAU PLEINE R	05/28/1959	07/31/1993
* 2113	WISCONSIN VALLEY	WIS VALLEY IMPROVEMENT CO	MON	0	WI	TOMAHAWK	05/28/1959	07/31/1993
* 2113	WISCONSIN VALLEY	WIS VALLEY IMPROVEMENT CO	MON	0	WI	ST GERMAIN	05/28/1959	07/31/1993
* 2113	WISCONSIN VALLEY	WIS VALLEY IMPROVEMENT CO	MON	0	WI	WISCONSIN	05/28/1959	07/31/1993
* 2113	WISCONSIN VALLEY	WIS VALLEY IMPROVEMENT CO	MON	0	WI	TWIN	05/28/1959	07/31/1993
* 2113	WISCONSIN VALLEY	WIS VALLEY IMPROVEMENT CO	MON	0	WI	BUCKATAPHON CR	05/28/1959	07/31/1993
* 2113	WISCONSIN VALLEY	WIS VALLEY IMPROVEMENT CO	MON	0	WI	DEERSKIN	05/28/1959	07/31/1993
* 2113	WISCONSIN VALLEY	WIS VALLEY IMPROVEMENT CO	MON	0	WI	LITTLE DEERSKIN CR	05/28/1959	07/31/1993
* 2113	WISCONSIN VALLEY	WIS VALLEY IMPROVEMENT CO	MON	0	WI	LITTLE ST GERMAIN CR	05/28/1959	07/31/1993
* 2113	WISCONSIN VALLEY	WIS VALLEY IMPROVEMENT CO	MON	0	WI	SEVEN MILE CR	05/28/1959	07/31/1993
* 2113	WISCONSIN VALLEY	WIS VALLEY IMPROVEMENT CO	MON	0	WI	SUGAR CAMP CR	05/28/1959	07/31/1993
* 2113	WISCONSIN VALLEY	WIS VALLEY IMPROVEMENT CO	MON	0	WI	EAGLE	05/28/1959	07/31/1993
* 2113	WISCONSIN VALLEY	WIS VALLEY IMPROVEMENT CO	MON	0	WI	NINE MILE CR	05/28/1959	07/31/1993
* 2114	PRIEST RAPIDS	GRANT COUNTY PUD NO 2	MOP	788500	WA	COLUMBIA	11/04/1955	10/31/2005
* 2114	PRIEST RAPIDS	GRANT COUNTY PUD NO 2	MOP	831250	WA	COLUMBIA	11/04/1955	10/31/2005
* 2130	STANISLAUS-SPRING GAP	PACIFIC GAS AND ELEC CO	MON	81900	CA	STANISLAUS M FK	01/01/1955	12/31/2004

* 2130	STANISLAUS-SPRING GAP	PACIFIC GAS AND ELEC CO	MON	6000		CA	STANISLAUS S FK	01/01/1955	12/31/2004
R 2131	KINGSFORD	WISCONSIN ELECTRIC PWR CO	MON	7200		MI	MENOMINEE	01/25/1979	06/30/2004
* 2142	INDIAN PND-HARRIS	CENTRAL MAINE POWER CO	MON	76460		ME	KENNEBEC	05/21/1952	12/31/2001
* 2144	BOUNDARY	SEATTLE DEPT OF LIGHTING	MOP	551000	392000	WA	PEND OREILLE	07/10/1961	09/30/2011
* 2145	ROCKY REACH	CHELAN COUNTY PUD NO 1	MOP	1213150		WA	COLUMBIA	07/11/1957	06/30/2006
* 2146	COOSA RIVER	ALABAMA POWER CO	MON	225000		AL	COOSA	09/04/1957	07/31/2007
* 2146	COOSA RIVER	ALABAMA POWER CO	MON	177000		AL	COOSA	09/04/1957	07/31/2007
* 2146	COOSA RIVER	ALABAMA POWER CO	MON	128250		AL	COOSA	09/04/1957	07/31/2007
* 2146	COOSA RIVER	ALABAMA POWER CO	MON	72900		AL	COOSA	09/04/1957	07/31/2007
* 2146	COOSA RIVER	ALABAMA POWER CO	MON	87750		AL	COOSA	09/04/1957	07/31/2007
* 2149	WELLS	DOUGLAS COUNTY PUD NO 1	MOP	774250		WA	COLUMBIA	07/12/1962	05/31/2012
* 2150	BAKER	PUGET SOUND POWER & LIGHT CO	MON	64000		WA	BAKER	06/04/1956	04/30/2006
* 2150	BAKER	PUGET SOUND POWER & LIGHT CO	MON	94400		WA	BAKER	05/04/1956	04/30/2006
* 2153	SANTA FELICIA RES	UNITED WTR CONSERVTN DIST	MOP	0	2055	CA	PIRU SESPE	05/01/1954	04/30/2004
* 2155	CHILI BAR	PACIFIC GAS AND ELEC CO	MON	7020		CA	AMERICAN S FK	08/28/1962	07/31/2007
* 2157	UPPER SULTAN	SNOHOMISH CNTY PUD NO 1	MOP	111800		WA	SULTAN	06/01/1961	05/31/2011
R 2161	RHINELANDER	RHINELANDER PAPER CO	MON	2000		WI	WISCONSIN	01/23/1981	06/30/2000
* 2165	BANKHEAD, JOHN H.	ALABAMA POWER CO	MON	45125		AL	BLACK WARRIOR	09/12/1957	08/31/2007
* 2165	BANKHEAD, JOHN H.	ALABAMA POWER CO	MON	157500		AL	SIPSEY FK	09/12/1957	08/31/2007
* 2169	CHILHOWEE LAKE	TAPOCO INC	MON	110000		TN	LITTLE TENNESSEE	03/17/1955	02/28/2005
* 2169	CHILHOWEE LAKE	TAPOCO INC	MON	45000		TN	CHEOAH	03/17/1955	02/28/2005
* 2169	CHILHOWEE LAKE	TAPOCO INC	MON	121500		TN	LITTLE TENNESSEE	03/17/1955	02/28/2005
* 2169	CHILHOWEE LAKE	TAPOCO INC	MON	50000		TN	LITTLE TENNESSEE	03/17/1955	02/28/2005
* 2170	COOPER LAKE	CHUGACH ELEC ASSN INC	MON	15000		AK	COOPER CR	05/01/1957	04/30/2007
* 2174	PORTAL	SOUTHERN CALIFORNIA EDISON CO	MON	10000		CA	BIG CREEK	04/19/1955	03/31/2005
* 2175	BIG CREEK NO 1 & 2	SOUTHERN CALIFORNIA EDISON CO	MON	57750		CA	BIG CREEK	03/29/1959	02/28/2009
* 2175	BIG CREEK NO 1 & 2	SOUTHERN CALIFORNIA EDISON CO	MON	66900		CA	BIG CREEK	03/29/1959	02/28/2009
* 2177	CHATTAHOOCHEE	GEORGIA POWER CO	MON	29600		GA	CHATTAHOOCHEE	03/05/1959	12/31/2004
* 2177	CHATTAHOOCHEE	GEORGIA POWER CO	MON	60000		GA	CHATTAHOOCHEE	03/05/1959	12/31/2004
* 2177	CHATTAHOOCHEE	GEORGIA POWER CO	MON	26000		GA	CHATTAHOOCHEE	03/05/1959	12/31/2004
* 2179	MCSWAIN & NEW EXCHEQUER	MERCED IRRIG DIST	MOP	80000		CA	MERCED	04/18/1964	02/28/2014
* 2179	MCSWAIN & NEW EXCHEQUER	MERCED IRRIG DIST	MOP	0		CA	MERCED	04/18/1964	02/28/2014
R 2180	GRANDMOTHER	OWENS-ILLINOIS INC	MON	3000		WI	WISCONSIN	09/16/1977	06/30/2003
* 2181	MENOMONIE	NORTHERN STATES POWER CO	MON	5400		WI	RED CEDAR	04/17/1956	03/31/2005
* 2183	MARKHAM FERRY	GRAND RIVER DAM AUTHORITY	MOP	100000		OK	GRAND	06/01/1955	05/31/2005
* 2187	GEORGETOWN	PUBLIC SERVICE CO OF COLO	NON	1440		CO	CLEAR CREEK S FK	08/27/1964	12/31/1993
* 2188	MISSOURI-MADISON	MONTANA POWER CO THE	MON	0		MT	MADISON	04/23/1956	11/30/1998
* 2188	MISSOURI-MADISON	MONTANA POWER CO THE	MON	9000		MT	MADISON	04/23/1956	11/30/1998
* 2188	MISSOURI-MADISON	MONTANA POWER CO THE	MON	17000		MT	MISSOURI	04/23/1956	11/30/1998
* 2188	MISSOURI-MADISON	MONTANA POWER CO THE	MON	38400		MT	MISSOURI	04/23/1956	11/30/1998

* 2188	MISSOURI-MADISON	MONTANA POWER CO THE	MON	35600	MT	MISSOURI	04/23/1956	11/30/1998
* 2188	MISSOURI-MADISON	MONTANA POWER CO THE	MON	16800	MT	MISSOURI	04/23/1956	11/30/1998
* 2188	MISSOURI-MADISON	MONTANA POWER CO THE	MON	45000	MT	MISSOURI	04/23/1956	11/30/1998
* 2188	MISSOURI-MADISON	MONTANA POWER CO THE	MON	48000	MT	MISSOURI	04/23/1956	11/30/1998
* 2188	MISSOURI-MADISON	MONTANA POWER CO THE	MON	48000	MT	MISSOURI	04/23/1956	11/30/1998
R 2192	BIRON NO. 2	CONSOLIDATED WATER P WR CO	MON	3300	WI	WISCONSIN	08/14/1980	06/30/2000
* 2194	BAR MILLS	CENTRAL MAINE POWER CO	MON	4000	ME	SACO	05/11/1956	06/30/2005
* 2195	NORTH FORK	PORTLAND GENERAL ELE C CO	MON	19050	OR	CLACKAMAS	01/18/1957	08/31/2006
* 2195	NORTH FORK	PORTLAND GENERAL ELE C CO	MON	34450	OR	CLACKAMAS	01/18/1957	08/31/2006
* 2195	NORTH FORK	PORTLAND GENERAL ELE C CO	MON	38400	OR	CLACKAMAS	01/18/1957	08/31/2006
* 2197	YADKIN FALLS	YADKIN INC	MON	42000	NC	YADKIN	05/01/1958	04/30/2008
* 2197	YADKIN FALLS	YADKIN INC	MON	96500	NC	YADKIN	05/01/1958	04/30/2008
* 2197	YADKIN FALLS	YADKIN INC	MON	29500	NC	YADKIN	05/01/1958	04/30/2008
* 2197	YADKIN FALLS	YADKIN INC	MON	33000	NC	YADKIN	05/01/1958	04/30/2008
* 2198	SANTA ANA NO 3	SOUTHERN CALIFORNIA EDISON CO	MON	1500	CA	SANTA ANA	05/01/1959	04/30/2009
* 2203	HOLT LOCK AND DAM	ALABAMA POWER CO	MON	40000	AL	BLACK WARRIOR	10/07/1965	08/31/2015
* 2204	WILLIAMS FORK	DENVER CITY & COUNTY OF	MOP	3000	CO	WILLIAMS FORK	01/31/1963	12/31/2007
* 2205	LAMOILLE RIVER	CENTRAL VERMONT PUBL IC SERVICE CORP	MON	5000	VT	LAMOILLE	05/07/1968	12/31/1987
* 2205	LAMOILLE RIVER	CENTRAL VERMONT PUBL IC SERVICE CORP	MON	6000	VT	LAMOILLE	05/07/1968	12/31/1987
* 2205	LAMOILLE RIVER	CENTRAL VERMONT PUBL IC SERVICE CORP	MON	3000	VT	LAMOILLE	05/07/1968	12/31/1987
* 2205	LAMOILLE RIVER	CENTRAL VERMONT PUBL IC SERVICE CORP	MON	2880	VT	LAMOILLE	05/07/1968	12/31/1987
* 2206	BLEWETT FALLS LAKE & TILLERY	CAROLINA POWER AND L T CO	MON	84000	NC	YADKIN	05/19/1958	04/30/2008
* 2206	BLEWETT FALLS LAKE & TILLERY	CAROLINA POWER AND L T CO	MON	24600	NC	YADKIN	05/19/1958	04/30/2008
R 2207	MOSINEE	MOSINEE PAPER MILLS CO	MON	3050	WI	WISCONSIN	01/05/1982	12/31/2004
* 2210	LEESVILLE & SMITH MT LAKES	APPALACHIAN POWER CO	MON	47500	VA	ROANOKE	04/25/1960	03/31/2010
* 2210	LEESVILLE & SMITH MT LAKES	APPALACHIAN POWER CO	MON	640000	VA	ROANOKE	04/25/1960	03/31/2010
* 2211	MARKLAND	PUBLIC SERVICE CO OF IND	MON	81000	IN	OHIO	05/31/1961	04/30/2011
* 2212	ROTHSCHILD	WEYERHAEUSER CO	MON	3640	WI	WISCONSIN	04/28/1959	07/31/1993
* 2213	SWIFT NO 2	COWLITZ COUNTY PUD N O 1	MOP	70000	WA	LEWIS	11/29/1956	04/30/2006
* 2216	NIAGARA-LEWISTON	POWER AUTHORITY OF T HE STATE OF NY	MOP	1950000	NY	NIAGARA	01/30/1958	08/31/2007
* 2216	NIAGARA-LEWISTON	POWER AUTHORITY OF T HE STATE OF NY	MOP	240000	NY	NIAGARA	01/30/1958	08/31/2007
* 2219	BOULDER CREEK	GARKANE POWER ASSN I NC	MON	4200	UT	BOULDER CR	05/27/1957	04/30/2007
R 2221	OZARK BEACH	EMPIRE DISTRICT ELEC CO	MON	16000	MO	WHITE	08/24/1970	08/31/1993
* 2225	SULLIVAN LAKE	PEND OREILLE PUD NO 1	MOP	0	WA	SULLIVAN CREEK	11/25/1958	09/30/2008
* 2230	BLUE LAKE	SITKA CITY & BOROUGH OF	MOP	6000	AK	MEDVETCHA	04/24/1958	03/31/2008
* 2232	WYLIE	DUKE POWER CO	MON	20000	SC	CATAWBA	09/17/1958	08/31/2008

*	2232	WYLIE	DUKE POWER CO	MON	25500		SC	CATAWBA	09/17/1958	08/31/2008
*	2232	WYLIE	DUKE POWER CO	MON	36000		SC	CATAWBA	09/17/1958	08/31/2008
*	2232	WYLIE	DUKE POWER CO	MON	18720		SC		09/17/1958	08/31/2008
*	2232	WYLIE	DUKE POWER CO	MON	350000		SC	CATAWBA	09/17/1958	08/31/2008
*	2232	WYLIE	DUKE POWER CO	MON	73000		SC	CATAWBA	09/17/1958	08/31/2008
*	2232	WYLIE	DUKE POWER CO	MON	60000		SC	CATAWBA	09/17/1958	08/31/2008
*	2232	WYLIE	DUKE POWER CO	MON	56000		SC	CATAWBA RIVER	09/17/1958	08/31/2008
*	2232	WYLIE	DUKE POWER CO	MON	69000		SC	CATAWBA	09/17/1958	08/31/2008
*	2232	WYLIE	DUKE POWER CO	MON	36720		SC	CATAWBA	09/17/1958	08/31/2008
*	2232	WYLIE	DUKE POWER CO	MON	60000		SC	CATAWBA	09/17/1958	08/31/2008
*	2233	WILLAMETTE	CROWN ZELLERBACH CORP	MON	15660		OR	WILLAMETTE	06/21/1960	12/31/2004
*	2233	WILLAMETTE	CROWN ZELLERBACH CORP	MON	15400		OR	WILLAMETTE	06/21/1960	12/31/2004
*	2233	WILLAMETTE	CROWN ZELLERBACH CORP	MON	10300		OR	WILLAMETTE	06/21/1960	12/31/2004
*	2237	MORGAN FALLS	GEORGIA POWER CO	MON	16800		GA	CHATTAHOOCHEE	03/27/1959	02/28/2009
*	2239	KINGS DAM	TOMAHAWK POWER & PULP CO	MON	2770		WI	WISCONSIN	07/01/1959	07/31/1993
*	2242	TRAIL BRIDGE & CARMEN	EUGENE CITY OF	MOP	10000		OR	MCKENZIE SMITH	01/08/1959	11/30/2008
*	2242	TRAIL BRIDGE & CARMEN	EUGENE CITY OF	MOP	80000		OR	MCKENZIE	01/08/1959	11/30/2008
*	2244	PACKWOOD LAKE	WASHINGTON PUB PWR SU SYS	MOP	26125		WA	LAKE CR	07/07/1960	02/28/2010
*	2245	CANNELTON	VANCEBURG CITY OF	MOP		70560	KY	OHIO	03/29/1976	02/28/2026
*	2246	YUBA RIVER	YUBA COUNTY WATER AGENCY	MOP	46700		CA	YUBA	05/16/1963	04/30/2013
*	2246	YUBA RIVER	YUBA COUNTY WATER AGENCY	MOP	284400		CA	YUBA N FORK	05/16/1963	04/30/2013
*	2251	SAN JUAN	NEW ENGLAND FISH CO	MON	100		AK	SAN JUAN LAKE	10/08/1957	10/07/1977
*	2255	CENTRALIA	NEKOOSA PAPERS INC	MON	3200		WI	WISCONSIN	09/01/1959	07/31/1993
*	2256	WISCONSIN RAPIDS	CONSOLIDATED WATER PWR CO	MON	4680		WI	WISCONSIN	10/05/1959	07/31/1993
*	2266	YUBA-BEAR	NEVADA IRRIGATION DISTRICT	MOP		3500	CA	MIDDLE YUBA	06/24/1963	04/30/2013
*	2266	YUBA-BEAR	NEVADA IRRIGATION DISTRICT	MOP	11000		CA	BEAR R	06/24/1963	04/30/2013
*	2266	YUBA-BEAR	NEVADA IRRIGATION DISTRICT	MOP		3000	CA	CANYON CREEK	06/24/1963	04/30/2013
*	2266	YUBA-BEAR	NEVADA IRRIGATION DISTRICT	MOP	37350		CA	BEAR R	06/24/1963	04/30/2013
*	2266	YUBA-BEAR	NEVADA IRRIGATION DISTRICT	MOP	22800		CA	BEAR R	06/24/1963	04/30/2013
*	2267	PULP MILL	ALASKA LUMBER PULP CO INC	MON	0	900	AK	MEDVETCHA	06/21/1960	03/31/2010
*	2275	SALIDA HYDRO NO 1 & NO 2	PUBLIC SERVICE CO OF COLO	NON	560		CO	ARKANSAS, S. FORK	03/05/1965	12/31/1993
*	2275	SALIDA HYDRO NO 1 & NO 2	PUBLIC SERVICE CO OF COLO	NON	750		CO	ARKANSAS, S. FORK	03/05/1965	12/31/1993
*	2277	TAUM SAUK	UNION ELECTRIC CO	MON	350000		MO	BLACK E FK	08/26/1965	06/30/2010
*	2280	KINZUA P S	PENN ELEC CO-CLEV EL ILLM	MON	355000		PA	ALLEGHENY	12/28/1965	11/30/2015
*	2283	DEER RIPS-ANDROSCOGGIN-GULF ISLAND	CENTRAL MAINE POWER CO	MON	6540		ME	ANDROSCOGGIN	07/05/1962	12/31/1993
*	2283	DEER RIPS-ANDROSCOGGIN-GULF ISLAND	CENTRAL MAINE POWER CO	MON	3600		ME	ANDROSCOGGIN	07/05/1962	12/31/1993
*	2283	DEER RIPS-ANDROSCOGGIN-GULF ISLAND	CENTRAL MAINE POWER CO	MON	19200		ME	ANDROSCOGGIN	07/05/1962	12/31/1993
*	2284	TOPSHAM-BRUNSWICK	CENTRAL MAINE POWER	MON	19000		ME	ANDROSCOGGIN	02/09/1979	01/31/2029

		CO							
* 2287	J BRODIE SMITH	PUBLIC SERVICE CO OF N H	MON	15000		NH	ANDROSCOGGIN	04/25/1962	12/31/1993
* 2288	GORHAM	PUBLIC SERVICE CO OF N H	MON	2150		NH	ANDROSCOGGIN	04/25/1962	12/31/1993
* 2290	KERN RIVER NO 3	SOUTHERN CALIFORNIA EDISON CO	MON	32000		CA	KERN	08/07/1954	12/31/1993
* 2291	PORT EDWARDS	NEKOOSA PAPERS INC	MON	3593		WI	WISCONSIN	07/19/1962	07/31/1993
* 2292	NEKOOSA	NEKOOSA PAPERS INC	MON	3800		WI	WISCONSIN	07/30/1962	07/31/1993
* 2299	NEW DON PEDRO	TURLOCK MODESTO IRRIG DIS	MOP	130400		CA	TUOLUMNE	03/10/1964	04/30/2016
* 2300	SHELBURNE	JAMES RIVER-N H ELEC INC	MON	3720		NH	ANDROSCOGGIN	07/19/1962	12/31/1993
* 2301	MYSTIC LAKE	MONTANA POWER CO THE	MON	10000		MT	WEST ROSEBUD CR	10/05/1976	12/31/2009
* 2302	LEWISTON FALLS	UNION WATER POWER CO	MON	700	25000	ME	ANDROSCOGGIN	12/02/1963	12/31/1993
* 2304	BLUE RIDGE	PHELPS DODGE CORP	MON	2800		AZ	EAST CLEAR CR	03/20/1963	12/31/2012
* 2305	TOLEDO BEND	SABINE RIVER AUTH LA & TEX	MOP	85000		TX	SABINE	10/14/1963	09/30/2013
* 2306	CLYDE	CITIZENS UTILITIES CO	MON	3600		VT	CLYDE	11/30/1962	12/31/1993
* 2306	CLYDE	CITIZENS UTILITIES CO	MON	0		VT	CLYDE	11/30/1962	12/31/1993
* 2306	CLYDE	CITIZENS UTILITIES CO	MON	0		VT	CLYDE	11/30/1962	12/31/1993
* 2306	CLYDE	CITIZENS UTILITIES CO	MON	0		VT	CLYDE	11/30/1962	12/31/1993
* 2306	CLYDE	CITIZENS UTILITIES CO	MON	1600		VT	CLYDE	11/30/1962	12/31/1993
* 2307	SALMON CREEK & ANNEX CREEK	ALASKA ELEC LIGHT&POW CO	MON	3500		AK	ANNEX CR	10/24/1963	08/31/1988
* 2307	SALMON CREEK & ANNEX CREEK	ALASKA ELEC LIGHT&POW CO	MON	9500	2800	AK	SALMON CR UPPER	10/24/1963	08/31/1988
* 2309	YARDS CREEK	JERSEY CENTRAL PWR AND LT	MON	338625		NJ	DELAWARE	03/14/1963	02/28/2013
* 2310	DRUM-SPAULDING	PACIFIC GAS AND ELEC CO	MON	2000		CA	LITTLE BEAR	06/24/1963	04/30/2013
* 2310	DRUM-SPAULDING	PACIFIC GAS AND ELEC CO	MON			CA	WISE CANAL	06/24/1963	04/30/2013
* 2310	DRUM-SPAULDING	PACIFIC GAS AND ELEC CO	MON			CA	BEAR RIVER CANAL	06/24/1963	04/30/2013
* 2310	DRUM-SPAULDING	PACIFIC GAS AND ELEC CO	MON			CA	LAKE VALLEY CANAL	06/24/1963	04/30/2013
* 2310	DRUM-SPAULDING	PACIFIC GAS AND ELEC CO	MON		10800	CA	SOUTH CANAL	06/24/1963	04/30/2013
* 2310	DRUM-SPAULDING	PACIFIC GAS AND ELEC CO	MON	6300	2700	CA	YUBA S	06/24/1963	04/30/2013
* 2310	DRUM-SPAULDING	PACIFIC GAS AND ELEC CO	MON	5500		CA	YUBA S & DEER CR	06/24/1963	04/30/2013
* 2310	DRUM-SPAULDING	PACIFIC GAS AND ELEC CO	MON	12000		CA	AMERICAN N F	06/24/1963	04/30/2013
* 2310	DRUM-SPAULDING	PACIFIC GAS AND ELEC CO	MON	12000		CA	AMERICAN N F	06/24/1963	04/30/2013
* 2310	DRUM-SPAULDING	PACIFIC GAS AND ELEC CO	MON	22000		CA	BEAR	06/24/1963	04/30/2013
* 2310	DRUM-SPAULDING	PACIFIC GAS AND ELEC CO	MON	93300		CA	YUBA S,BEAR,AMERICAN N F	06/24/1963	04/30/2013
* 2310	DRUM-SPAULDING	PACIFIC GAS AND ELEC CO	MON	10750		CA	YUBA S	06/24/1963	04/30/2013
* 2311	GORHAM	JAMES RIVER-N H ELEC INC	MON	4800		NH	ANDROSCOGGIN	12/04/1963	12/31/1993

* 2312	GREAT WORKS	DIAMOND INTER CORP	MON	4580	3150	ME	PENOBSCOT	12/09/1963	03/31/2002
* 2315	NEAL SHOALS	SOUTH CAROLINA ELEC & GAS CO	MON	5200		SC	BROAD	11/21/1963	12/31/1993
* 2318	E J WEST	NIAGARA MOHAWK POWER CORP	MON	20000		NY	SACANDAGA	06/25/1963	12/31/1993
* 2320	RAQUETTE	NIAGARA MOHAWK POWER CORP	MON	4800		NY	RAQUETTE	06/12/1964	12/31/1993
* 2320	RAQUETTE	NIAGARA MOHAWK POWER CORP	MON	7200		NY	RAQUETTE	06/12/1964	12/31/1993
* 2320	RAQUETTE	NIAGARA MOHAWK POWER CORP	MON	4480		NY	RAQUETTE	06/12/1964	12/31/1993
* 2320	RAQUETTE	NIAGARA MOHAWK POWER CORP	MON	29520		NY	RAQUETTE	06/12/1964	12/31/1993
2322	SHAWMUT	CENTRAL MAINE POWER CO	MON	4650	4090	ME	KENNEBEC	01/05/1981	01/31/2021
* 2323	DEERFIELD RIVER	NEW ENGLAND POWER CO	MON	0		MA	DEERFIELD E BR	10/29/1963	12/31/1993
* 2323	DEERFIELD RIVER	NEW ENGLAND POWER CO	MON	4000		MA	DEERFIELD	10/29/1963	12/31/1993
* 2323	DEERFIELD RIVER	NEW ENGLAND POWER CO	MON	33600		MA	DEERFIELD	10/29/1963	12/31/1993
* 2323	DEERFIELD RIVER	NEW ENGLAND POWER CO	MON	7200		MA	DEERFIELD	10/29/1963	12/31/1993
* 2323	DEERFIELD RIVER	NEW ENGLAND POWER CO	MON	4800		MA	DEERFIELD	10/29/1963	12/31/1993
* 2323	DEERFIELD RIVER	NEW ENGLAND POWER CO	MON	4800		MA	DEERFIELD	10/29/1963	12/31/1993
* 2323	DEERFIELD RIVER	NEW ENGLAND POWER CO	MON	4800		MA	DEERFIELD	10/29/1963	12/31/1993
* 2323	DEERFIELD RIVER	NEW ENGLAND POWER CO	MON	15000		MA	DEERFIELD	10/29/1963	12/31/1993
* 2325	WESTON	CENTRAL MAINE POWER CO	MON	12000		ME	KENNEBEC	10/15/1964	12/31/1993
* 2326	CROSS	JAMES RIVER-N H ELEC INC	MON	3220		NH	ANDROSCOGGIN	07/06/1964	12/31/1993
* 2327	CASCADE	JAMES RIVER-N H ELEC INC	MON	7200		NH	ANDROSCOGGIN	07/07/1964	12/31/1993
* 2329	WYMAN	CENTRAL MAINE POWER CO	MON	72000		ME	KENNEBEC	10/15/1964	12/31/1993
* 2330	RAQUETTE	NIAGARA MOHAWK POWER CORP	MON	2000		NY	RAQUETTE	07/16/1964	12/31/1993
* 2330	RAQUETTE	NIAGARA MOHAWK POWER CORP	MON	2000		NY	RAQUETTE	07/16/1964	12/31/1993
* 2330	RAQUETTE	NIAGARA MOHAWK POWER CORP	MON	3000		NY	RAQUETTE	07/16/1964	12/31/1993
* 2330	RAQUETTE	NIAGARA MOHAWK POWER CORP	MON	4500		NY	RAQUETTE	07/16/1964	12/31/1993
* 2331	NINETY NINE ISLANDS	DUKE POWER CO	MON	18000		SC	BROAD	07/15/1964	12/31/1993
* 2332	GASTON SHOALS	DUKE POWER CO	MON	9140		SC	BROAD	07/24/1964	12/31/1993
* 2333	RUMFORD FALLS	RUMFORD FALLS POWER CO	MON	12800		ME	ANDROSCOGGIN	05/14/1965	12/31/1993
* 2333	RUMFORD FALLS	RUMFORD FALLS POWER CO	MON	21970		ME	ANDROSCOGGIN	05/14/1965	12/31/1993
* 2334	GARDNER FALLS	WESTERN MASS ELECTRIC CO	MON	3580		MA	DEERFIELD	07/15/1964	12/31/1993
* 2335	WILLIAMS	CENTRAL MAINE POWER CO	MON	13000		ME	KENNEBEC	07/24/1964	12/31/1987
* 2336	LLOYD SHOALS	GEORGIA POWER CO	MON	14400		GA	OCMULGEE	01/05/1968	12/31/1993
* 2337	PROSPECT NO 3	PACIFIC POWER & LIGHT CO	MON	7200		OR	ROGUE S FK	07/08/1964	12/31/1988
* 2341	LANGDALE	GEORGIA POWER CO	NON	1040		GA	CHATTAHOOCHEE	10/15/1964	12/31/1993
* 2342	CONDIT	PACIFIC POWER & LIGHT CO	MON	9600		WA	WHITE SALMON	12/20/1968	12/31/1993
* 2343	MILLVILLE	POTOMAC EDISON CO	MON	2840		WV	SHENANDOAH	08/11/1964	12/31/1987
* 2347	JANESVILLE	WISCONSIN POWER AND LT CO	NON	500		WI	ROCK	10/07/1964	12/31/1993
* 2348	BELOIT	WISCONSIN POWER AND LT CO	NON	380		WI	ROCK	10/07/1964	12/31/1993

350	RIVERVIEW	GEORGIA POWER CO	NON	480		GA	CHATTAHOOCHEE	03/02/1965	12/31/1993
351	CABIN CREEK	PUBLIC SERVICE CO OF COLO	MON	300000		CO	CLEAR CREEK SO	03/23/1964	02/28/2014
352	MENASHA	GEORGE A WHITING PAPER CO	NON	250		WI	FOX RIVER	03/02/1965	10/31/1988
354	TUGALO & TALLULAH	GEORGIA POWER CO	MON	22500		GA	TUGALO	05/07/1964	12/31/1993
354	TUGALO & TALLULAH	GEORGIA POWER CO	MON	45000		GA	TUGALO	05/07/1964	12/31/1993
354	TUGALO & TALLULAH	GEORGIA POWER CO	MON	6120		GA	TALLULAH	05/07/1964	12/31/1993
354	TUGALO & TALLULAH	GEORGIA POWER CO	MON	4800		GA	TALLULAH	05/07/1964	12/31/1993
354	TUGALO & TALLULAH	GEORGIA POWER CO	MON	16000		GA	TALLULAH	05/07/1964	12/31/1993
354	TUGALO & TALLULAH	GEORGIA POWER CO	MON	72000		GA	TALLULAH	05/07/1964	12/31/1993
355	MUDDY RUN P S	PHILA ELECT PWR CO E TAL	MON	800000		PA	SUSQUEHANNA	09/21/1964	09/01/2004
357	WHITE RAPIDS	WISCONSIN ELECTRIC PWR CO	MON	8000		MI	MENOMINEE	03/10/1965	12/31/1993
360	ST LOUIS	MINNESOTA POWER & LIGHT CO	MON	0		MN	SKUNK & WHITEFACE	12/11/1964	12/31/1993
360	ST LOUIS	MINNESOTA POWER & LIGHT CO	MON	0		MN	OTTER	12/11/1964	12/31/1993
360	ST LOUIS	MINNESOTA POWER & LIGHT CO	MON	0		MN	CLOQUET	12/11/1964	12/31/1993
360	ST LOUIS	MINNESOTA POWER & LIGHT CO	MON	0		MN	BEAVER	12/11/1964	12/31/1993
360	ST LOUIS	MINNESOTA POWER & LIGHT CO	MON	0		MN	BEAVER	12/11/1964	12/31/1993
3'	ST LOUIS	MINNESOTA POWER & LIGHT CO	MON	0		MN	ST LOUIS	12/11/1964	12/31/1993
360	ST LOUIS	MINNESOTA POWER & LIGHT CO	MON	0		MN	ST LOUIS	12/11/1964	12/31/1993
360	ST LOUIS	MINNESOTA POWER & LIGHT CO	MON	0		MN	ST LOUIS	12/11/1964	12/31/1993
360	ST LOUIS	MINNESOTA POWER & LIGHT CO	MON	83350		MN	ST LOUIS	12/11/1964	12/31/1993
361	PRAIRE RIVER	MINNESOTA POWER & LIGHT CO	NON	1084		MN	PRAIRIE	03/02/1965	12/31/1993
362	GRAND RAPIDS	BLANDIN PAPER COMPANY	MON	2100		MN	MISSISSIPPI	11/12/1965	12/31/1993
363	CLOQUET	POTLATCH CORPORATION	MON	6514		MN	ST LOUIS	12/11/1964	12/31/1993
364	ABENAKI	MADISON PAPER INDUSTRIES	MON	3650		ME	KENNEBEC	08/03/1964	04/30/2004
365	ANSON	MADISON PAPER INDUSTRIES	MON	6000		ME	KENNEBEC	08/11/1964	12/31/1993
366	MILLINOCKET LAKE	MAINE PUBLIC SERVICE CO	NON	0		ME	MILLINOCKET	01/04/1965	06/30/1992
367	CARIBOU	MAINE PUBLIC SERVICE CO	NON	800		ME	AROOSTOOK	01/04/1965	12/31/1993
368	SQUA PAN	MAINE PUBLIC SERVICE CO	NON	1500		ME	SQUA PAN STREAM	01/04/1965	12/31/1990
370	DEEP CREEK	PENN ELEC CO	MON	19200		MD	DEEP CREEK	07/23/1968	12/31/1993
372	WARRIOR RIDGE	PENN ELEC CO	MON			PA	JUNIATA	06/03/1968	12/31/1993
373	ROCKTON	SOUTH BELOIT W G & E CO	NON	1200		IL	ROCK	10/07/1964	12/31/1993
374	WATERVLIET	WATERVLIET PAPER CO	NON	300		MI	PAW PAW	03/03/1965	12/31/1990
375	RILEY-JAY-LIVERMORE	INTERNATIONAL PAPER CO	MON	7615	1000	ME	ANDROSCOGGIN	02/18/1965	09/30/1999
375	RILEY-JAY-LIVERMORE	INTERNATIONAL PAPER CO	MON	2500	625	ME	ANDROSCOGGIN	02/18/1965	09/30/1999
375	RILEY-JAY-LIVERMORE	INTERNATIONAL PAPER CO	MON	7800		ME	ANDROSCOGGIN	02/18/1965	09/30/1999
376	REUSENS	APPALACHIAN POWER CO	MON	12500		VA	JAMES	08/12/1964	12/31/1993

381	ASHTON & ST ANTHONY	UTAH POWER & LIGHT CO	MON	500		IC	HENRYS FORK OF SNAKE RI	12/19/1977	12/31/1987
381	ASHTON & ST ANTHONY	UTAH POWER & LIGHT CO	MON	5800		ID	HENRYS FORK OF SNAKE RI	12/19/1977	12/31/1987
385	GLEN FALLS	FINCH PRUYN AND CO	MON	5840		NY	HUDSON	02/25/1965	12/31/1993
386	HOLYOKE NO 1	HOLYOKE GAS AND EL DEPT	NON	1056		MA	CONNECTICUT CANAL	03/23/1965	02/28/1991
387	HOLYOKE NO 2	HOLYOKE GAS AND EL DEPT	NON	800		MA	CONNECTICUT CANAL	03/23/1965	03/31/1988
388	HOLYOKE NO 3	HOLYOKE GAS AND EL DEPT	NON	450		MA	CONNECTICUT CANAL	03/23/1965	05/31/1990
389	EDWARDS	AUGUSTA DEV CORP	MON	3500		ME	KENNEBEC	08/12/1964	12/31/1993
390	BIG FALLS	LAKE SUPERIOR DIST PWR CO	MON	7780		WI	FLAMBEAU RIVER	05/25/1965	12/31/1993
391	WARREN	POTOMAC EDISON CO	NON	750		VA	SHENANDOAH	03/02/1965	12/31/1993
392	GILMAN	GEORGIA PACIFIC CORP	MON	3390		VT	CONNECTICUT	05/17/1965	12/31/1990
394	CHALK HILL	WISCONSIN ELECTRIC PWR CO	MON	7800		MI	MENOMINEE	11/15/1965	06/30/1993
395	PIXLEY	FLAMBEAU PAPER CORP	NON	960		WI	N FK FLAMBEAU	11/18/1969	12/31/1993
396	PIERCE MILLS	CENTRAL VERMONT P S CORP	NON	250		VT	PASSUMPSIC	06/11/1969	12/31/1993
397	GAGE	CENTRAL VERMONT P S CORP	NON	700		VT	PASSUMPSIC	06/11/1969	12/31/1993
399	ARNOLD FALLS	CENTRAL VERMONT P S CORP	NON	350		VT	PASSUMPSIC	06/11/1969	12/31/1993
2400	PASSUMPSIC	CENTRAL VERMONT P S , CORP	NON	700		VT	PASSUMPSIC	02/11/1970	12/31/1993
2401	GRACE & COVE	UTAH POWER & LIGHT CO	MON	33000		ID	BEAR	10/06/1976	10/01/2001
2401	GRACE & COVE	UTAH POWER & LIGHT CO	MON	7500		ID	BEAR	10/06/1976	10/01/2001
2402	PRICKETT	UPPER PENINSULA POWER CO	MON	1760		MI	STURGEON	01/25/1968	12/31/1993
2403	VEAZIE	BANGOR HYDRO-ELECTRIC CO	MON	8400		ME	PENOBSCOT	02/18/1965	12/31/1987
2404	THUNDER BAY RIVER	ALPENA POWER CO	MON	1050		MI	THUNDER BAY	02/13/1968	12/31/1993
2404	THUNDER BAY RIVER	ALPENA POWER CO	MON	1800		MI	THUNDER BAY	02/13/1968	12/31/1993
2404	THUNDER BAY RIVER	ALPENA POWER CO	MON	0		MI	UPPER THUNDER BAY R	02/13/1968	12/31/1993
2404	THUNDER BAY RIVER	ALPENA POWER CO	MON	0		MI	THUNDER BAY LOWER SO BR	02/13/1968	12/31/1993
2404	THUNDER BAY RIVER	ALPENA POWER CO	MON	4000		MI	THUNDER BAY	02/13/1968	12/31/1993
2406	SALUDA	DUKE POWER CO	MON	2400		SC	SALUDA	09/13/1968	12/31/1993
2407	YATES	ALABAMA POWER CO	MON	32000		AL	TALLAPOOSA	01/14/1965	12/31/1993
2408	THURLOW DAM	ALABAMA POWER CO ET AL	MON	58000		AL	TALLAPOOSA	04/05/1965	12/31/1993
2409	NORTH FORK STANISLAUS	CALAVERAS COUNTY WTR DIST	MOP		200000	CA	NORTH FORK STANISLAUS RIVER	02/08/1982	01/31/2032
2409	NORTH FORK STANISLAUS	CALAVERAS COUNTY WTR DIST	MUP		5200	CA		02/08/1982	01/31/2032
2411	SCHOOLFIELD	DAN RIVER INC	MON	4550		VA	DAN	11/16/1976	12/31/1993
2413	WALLACE	GEORGIA POWER CO	MON	324000		GA	OCONEE	06/01/1970	05/31/2020
2416	WARE SHOALS	RIEGEL TEXTILE CORP	MON	5100	1100	SC	SALUDA	10/06/1976	09/30/200.
2417	HAYWARD	LAKE SUPERIOR DIST PWR CO	NON	168		WI	NAMEKAGON	08/17/1967	12/31/1993
2419	HILLMAN	ALPENA POWER CO	NON	250		MI	THUNDER BAY	03/04/1965	12/31/1993
2420	CUTLER	UTAH POWER & LIGHT CO	MON	30000		UT	BEAR	12/23/1968	12/31/1993
2421	LOWER HYDRO ELECT	FLAMBEAU PAPER CORP	NON	1200		WI	FLAMBEAU N FK	04/19/1966	12/31/1993
2422	SAWMILL	JAMES RIVER-N H ELEC	MON	3174		NH	ANDROSCOGGIN	07/30/1965	12/31/1993

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* 2423	RIVERSIDE	JAMES RIVER-N H ELEC INC	MON	7600		NH	ANDROSCOGGIN	08/20/1965	12/31/1993
* 2424	HYDRAULIC RACE	NIAGARA MOHAWK POWER CORP	MON	4687		NY	BARGE CANAL	12/09/1964	06/30/1991
* 2425	LURAY & NEWPORT	POTOMAC EDISON CO	MON	1400		VA	SHENANDOAH S FK	07/21/1965	12/31/1993
* 2425	LURAY & NEWPORT	POTOMAC EDISON CO	MON	1600		VA	SHENANDOAH S FK	07/21/1965	12/31/1993
* 2426	CALIFORNIA AQUEDUCT	CALIFORNIA DEPT OF WATER RESOURCES	MOP		7200	CA	MOJAVE SIPHON	03/22/1978	01/31/2022
* 2426	CALIFORNIA AQUEDUCT	CALIFORNIA DEPT OF WATER RESOURCES	MOP	75000		CA	CALIFORNIA AQUEDUCT	03/22/1978	01/31/2022
* 2426	CALIFORNIA AQUEDUCT	CALIFORNIA DEPT OF WATER RESOURCES	MOP	0	15000	CA	CALIFORNIA AQUEDUCT	03/22/1978	01/31/2022
* 2426	CALIFORNIA AQUEDUCT	CALIFORNIA DEPT OF WATER RESOURCES	MOP	0	5900	CA	CALIFORNIA AQUEDUCT	03/22/1978	01/31/2022
* 2426	CALIFORNIA AQUEDUCT	CALIFORNIA DEPT OF WATER RESOURCES	MOP	119700		CA	CALIFORNIA AQUEDUCT	03/22/1978	01/31/2022
* 2426	CALIFORNIA AQUEDUCT	CALIFORNIA DEPT OF WATER RESOURCES	MOP	1250000		CA	CALIFORNIA AQUEDUCT	03/22/1978	01/31/2022
* 2428	PIEDMONT	AQUENERGY SYSTEMS INC	NON	1000		SC	SALUDA	09/23/1970	12/31/1987
* 2431	BRULE	WISCONSIN ELECTRIC PWR CO	MON	5335		MI	BRULE	07/26/1967	12/31/1993
* 2433	GRAND RAPIDS	WISCONSIN PUB SERV CORP	MON	7020		MI	MENOMINEE	08/20/1965	12/31/1993
* 2436	FOOTE	CONSUMERS POWER CO	MON	9000		MI	AU SABLE	01/04/1966	12/31/1993
* 2438	WATERLOO & SENECA FALLS	NEW YORK ST EL AND G CORP	MON	8000		NY	SENECA	03/05/1965	12/31/1993
* 2438	WATERLOO & SENECA FALLS	NEW YORK ST EL AND G CORP	MON	1920		NY	SENECA CANAL	03/05/1965	12/31/1993
* 2440	CHIPPEWA FALLS	NORTHERN STATES POWER CO	MON	21600		WI	CHIPPEWA	04/07/1965	12/31/1993
* 2441	GREENVILLE	NORWICH CITY OF	MOP	800		CT	SHETUCKET	04/15/1965	12/31/1993
* 2442	WATERTOWN	WATERTOWN MUN ELEC DEPT	MOP	5400		NY	BLACK	09/20/1967	12/31/1993
* 2444	WHITE RIVER	LAKE SUPERIOR DIST PWR CO	NON	1000		WI	WHITE	05/03/1966	12/31/1993
* 2445	CENTER RUTLAND	VERMONT MARBLE CO	NON	275		VT	OTTER CR	08/19/1965	12/31/1993
* 2446	DIXON	COMMONWEALTH EDISON CO	MON	3200		IL	ROCK	04/17/1975	12/31/1993
* 2447	ALCONA	CONSUMERS POWER CO	MON	8000		MI	AU SABLE	05/14/1968	12/31/1993
* 2448	MIO	CONSUMERS POWER CO	MON	5000		MI	AU SABLE	05/14/1968	12/31/1993
* 2449	LOUD	CONSUMERS POWER CO	MON	4000		MI	AU SABLE	05/07/1968	12/31/1993
* 2450	COOKE	CONSUMERS POWER CO	MON	9000		MI	AU SABLE	05/14/1968	12/31/1993
* 2451	ROGERS	CONSUMERS POWER CO	MON	6000		MI	MUSKEGON	05/24/1968	12/31/1993
* 2452	HARDY	CONSUMERS POWER CO	MON	30000		MI	MUSKEGON	05/24/1968	12/31/1993
* 2453	FIVE CHANNELS	CONSUMERS POWER CO	MON	6000		MI	AU SABLE	01/09/1967	12/31/1993
* 2454	SYLVAN	MINNESOTA POWER & LIGHT CO	MON	1800		MN	CROW WING	06/28/1968	12/31/1993
* 2456	AYERS ISLAND	PUBLIC SERVICE CO OF N H	MON	8400		NH	PEMIGEWASSET	03/20/1967	12/31/1993
* 2457	EASTMAN FALLS	PUBLIC SERVICE CO OF N H	MON	4600		NH	PEMIGEWASSET	12/31/1969	12/31/1987
* 2458	PENOBSCOT	GT NORTHERN NEKOOSA CORP	MON	0		ME	PENOBSCOT W BR	10/14/1968	12/31/1993
* 2458	PENOBSCOT	GT NORTHERN NEKOOSA CORP	MON	8200		ME	PENOBSCOT W BR	10/14/1968	12/31/1993
* 2458	PENOBSCOT	GT NORTHERN NEKOOSA CORP	MON	8000		ME	PENOBSCOT W BR	10/14/1968	12/31/1993
* 2458	PENOBSCOT	GT NORTHERN NEKOOSA	MON	16980		ME	PENOBSCOT W BR	10/14/1968	12/31/1993

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* 2458	PENOBSCOT	GI NORTHERN NEKOOSA CORP	MON	7370		ME	PENOBSCOT W BR	10/14/1968	12/31/1993
* 2459	LAKE LYNN	WEST PENN POWER CO	MON	51200		WV	CHEAT	10/21/1970	12/31/1993
* 2464	WEED DAM	GRESHAM VILLAGE OF	NOP	630		WI	RED	07/13/1965	06/30/2015
* 2465	HOLLIDAYS BRIDGE	DUKE POWER CO	MON	3500		SC	SALUDA	05/09/1967	12/31/1993
* 2466	NIAGARA	APPALACHIAN POWER CO	MON	2400		VA	ROANOKE	03/26/1968	12/31/1993
* 2467	MERCED FALLS	PACIFIC GAS AND ELEC CO	MON	3440		CA	MERCED	07/28/1969	02/28/2014
* 2468	CROTON	CONSUMERS POWER CO	MON	8849		MI	MUSKEGON	05/24/1968	12/31/1993
* 2471	STURGEON RIVER	WISCONSIN ELECTRIC PWR CO	NON	800		MI	STURGEON	11/16/1966	12/31/1993
* 2473	CROWLEY RAPIDS	FLAMBEAU PAPER CORP	NON	1500		WI	FLAMBEAU N FK	09/30/1969	12/31/1993
* 2474	OSWEGO RIVER	NIAGARA MOHAWK POWER CORP	MON	1250		NY	OSWEGO	05/27/1968	12/31/1993
* 2474	OSWEGO RIVER	NIAGARA MOHAWK POWER CORP	MON	8000		NY	OSWEGO	05/27/1968	12/31/1993
* 2474	OSWEGO RIVER	NIAGARA MOHAWK POWER CORP	MON	8800		NY	OSWEGO	05/27/1968	12/31/1993
* 2475	THORNAPPLE	LAKE SUPERIOR DIST PWR CO	NON	1400		WI	FLAMBEAU	04/22/1965	12/31/1993
* 2476	JERSEY	WISCONSIN PUB SERV CORP	NON	512		WI	TOMAHAWK	08/09/1966	12/31/1993
* 2482	HUDSON	NIAGARA MOHAWK POWER CORP	MON	44400		NY	HUDSON	07/30/1968	12/31/1993
* 2482	HUDSON	NIAGARA MOHAWK POWER CORP	MON	28800		NY	HUDSON	07/30/1968	12/31/1993
* 2482	HUDSON	NIAGARA MOHAWK POWER CORP	MON	3800		NY	HUDSON	07/30/1968	05/18/1984
* 2482	HUDSON	NIAGARA MOHAWK POWER CORP	MON	4800		NY	HUDSON	07/30/1968	05/18/1984
* 2482	HUDSON	NIAGARA MOHAWK POWER CORP	MON	2250		NY	HUDSON	07/30/1968	05/18/1984
* 2484	GRESHAM	GRESHAM VILLAGE OF	NOP	275		WI	RED	01/16/1974	12/31/1987
* 2485	NORTHFIELD MT	WESTERN MASS ELECTRIC CO	MON	1000000		MA	CONNECTICUT	05/14/1968	04/30/2018
* 2486	PINE	WISCONSIN ELECTRIC PWR CO	MON	3600		WI	PINE	09/26/1967	12/31/1993
* 2487	HOOSIC FALLS	HYDRO-POWER INC	NON	0	1050	NY	HOOSIC RIVER	06/03/1966	12/31/1993
* 2489	CAVENDISH	CENTRAL VERMONT P S CORP	NON	1440		VT	BLACK	06/11/1969	12/31/1993
* 2490	TAFTSVILLE	CENTRAL VERMONT P S CORP	NON	500		VT	OTTAUQUECHEE	06/03/1966	12/31/1993
* 2491	JIM FALLS	NORTHERN STATES POWER CO	MON	14400	34800	WI	CHIPPEWA	07/24/1984	07/30/2033
* 2492	VANCEBORO RES	GEORGIA PACIFIC CORP	MON	0		ME	ST CROIX	04/04/1966	03/01/2016
* 2493	SNOQUALMIE FALLS	PUGET SOUND POWER & LIGHT CO	MON	41690		WA	SNOQUALMIE	05/13/1975	12/31/1993
* 2496	LEABURG	EUGENE CITY OF	MOP	13500		OR	MCKENZIE	06/03/1968	12/31/1993
* 2497	MT TOM MILL	LINWEAVE INC	NON	400		MA	CONNECTICUT CANAL	04/02/1975	02/28/1991
* 2500	MECHANICVILLE	NIAGARA MOHAWK POWER CORP	MON	4500		NY	HUDSON	07/31/1968	05/18/1984
* 2503	KEOWEE & JOCASSEE	DUKE POWER CO	MON	157500		SC	KEOWEE & LITTLE	09/01/1966	08/31/2016
* 2503	KEOWEE & JOCASSEE	DUKE POWER CO	MON	612000		SC	KEOWEE	09/01/1966	08/31/2016
* 2506	ESCANABA	ESCANABA PAPER CO	MON	4740		MI	ESCANBA	04/12/1976	12/31/1993
* 2506	ESCANABA	ESCANABA PAPER CO	MON	2500		MI	ESCANABA	04/12/1976	12/31/1993
* 2506	ESCANABA	ESCANABA PAPER CO	MON	0		MI	ESCANABA	04/12/1976	12/31/1993
* 2506	ESCANABA	ESCANABA PAPER CO	MON	1950		MI	ESCANABA RIVER	04/12/1976	12/31/1993
* 2508	TENTH STREET	NORWICH CITY OF	NOP	1400		CT	SHETUCKET	04/15/1965	12/31/1993

* 2509	SHENANDOAH	POTOMAC EDISON CO	MON	862		VA	SHENANDOAH S FK	06/17/1966	12/31/1993
* 2510	WALTERVILLE	EUGENE CITY OF	MOP	8000		OR	MCKENZIE	05/23/1967	12/31/1993
* 2512	HAWKS NEST & GLEN FERRIS	ELKEM METALS COMPANY	MON	5450		WV	KANAWHA	03/09/1967	12/31/1987
* 2512	HAWKS NEST & GLEN FERRIS	ELKEM METALS COMPANY	MON	102000		WV	NEW	03/09/1967	12/31/1987
* 2513	ESSEX NO 19	GREEN MOUNTAIN POWER CORP	MON	7200		VT	WINOOSKI	01/21/1969	12/31/1993
* 2514	BYLLESBY & BUCK	APPALACHIAN POWER CO	MON	8505		VA	NEW	04/03/1978	12/31/1993
* 2514	BYLLESBY & BUCK	APPALACHIAN POWER CO	MON	21600		VA	NEW	04/03/1978	12/31/1993
* 2515	HARPERS FERRY	POTOMAC EDISON CO	MON	600		WV	POTOMAC	03/14/1966	12/31/1993
* 2516	DAM NO 4	POTOMAC EDISON CO	MON	1000	900	WV	POTOMAC	12/07/1976	12/31/2003
* 2517	DAM NO 5	POTOMAC EDISON CO	MON	1120		WV	POTOMAC	12/07/1976	12/31/2003
* 2519	NORTH GORHAM	CENTRAL MAINE POWER CO	MON	2250		ME	PRESUMPSCOT	12/06/1966	12/31/1993
* 2520	MATTACEUNK	GT NORTHERN NEKOOSA CORP	MON	19200		ME	PENOBSCOT	01/09/1967	12/31/1987
* 2522	JOHNSON FALLS	WISCONSIN PUB SERV CORP	MON	3520		WI	PESHTIGO	08/21/1968	12/31/1993
* 2523	OCONTO FALLS	WISCONSIN ELECTRIC PWR CO	MON	1320		WI	OCONTO	04/14/1967	12/31/1993
* 2524	SALINA	GRAND RIVER DAM AUTHORITY	MOP	260000		OK	SALINA CREEK	01/03/1966	11/30/2015
* 2525	CALDRON FALLS	WISCONSIN PUB SERV CORP	MON	6400		WI	PESHTIGO	06/11/1969	12/31/1993
* 2527	SKELTON	CENTRAL MAINE POWER CO	MON	16800		ME	SACO	08/20/1968	12/31/1993
* 2528	CATARACT	CENTRAL MAINE POWER CO	MON	6650		ME	SACO	08/20/1968	12/31/1987
* 2529	BONNY EAGLE	CENTRAL MAINE POWER CO	MON	7200		ME	SACO	11/19/1970	12/31/1993
* 2530	HIRAM	CENTRAL MAINE POWER CO	MON	10900	8500	ME	SACO	12/22/1982	11/30/2022
* 2531	WEST BUXTON	CENTRAL MAINE POWER CO	MON	2625		ME	SACO	02/06/1968	12/31/1987
* 2531	WEST BUXTON	CENTRAL MAINE POWER CO	MON	4000		ME	SACO RIVER	02/06/1968	12/31/1987
* 2532	LITTLE FALLS	MINNESOTA POWER & LIGHT CO	MON	3520	1250	MN	MISSISSIPPI	07/01/1969	12/31/1993
* 2533	BRAINERD	POTLATCH CORPORATION	MON	3342		MN	MISSISSIPPI	12/10/1976	12/31/1993
* 2534	MILFORD	BANGOR HYDRO-ELECTRIC CO	MON	6400		ME	PENOBSCOT	12/31/1969	12/31/1990
* 2535	STEVENS CREEK	SOUTH CAROLINA ELEC & GASCO	MON	18880		GA	SAVANNAH	01/20/1970	12/31/1993
* 2536	LITTLE QUINNESEC FALLS	NIAGARA OF WISC PAPER	MON	8388		WI	MENOMINEE RIVER	04/29/1975	06/30/1993
* 2538	BEEBEE ISLAND	NIAGARA MOHAWK POWER CORP	MON	8000		NY	BLACK	05/27/1968	12/31/1993
* 2539	SCHOOL ST COHOES	NIAGARA MOHAWK POWER CORP	MON	38800		NY	MOHAWK	06/11/1969	12/31/1993
* 2541	CASCADE	UTILITIES HOLDING COMPANY	NON	825		NC	LITTLE	10/13/1970	12/31/1993
* 2543	MILLTOWN	MONTANA POWER CO THE	MON	3040		MT	CLARK FK	05/01/1965	12/31/1993
* 2544	MEYERS FALLS	WASHINGTON WATER PWR CO	NON	1200		WA	COLVILLE	08/24/1970	12/31/1993
* 2545	SPOKANE RIVER	WASHINGTON WATER PWR CO	MON	14750		WA	SPOKANE	08/17/1972	08/01/2007
* 2545	SPOKANE RIVER	WASHINGTON WATER PWR CO	MON	70000		WA	SPOKANE	08/17/1972	08/01/2007
* 2545	SPOKANE RIVER	WASHINGTON WATER PWR	MON	12000		WA	SPOKANE	08/17/1972	08/01/2007

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*	2545	SPOKANE RIVER	WASHINGTON WATER PWR CO	MON	10000		WA	SPOKANE	08/17/1972	08/01/2007
*	2545	SPOKANE RIVER	WASHINGTON WATER PWR CO	MON	7200		WA	SPOKANE	08/17/1972	08/01/2007
*	2546	SANDSTONE	WISCONSIN PUB SERV CORP	MON	3840		WI	PESHTIGO	01/14/1969	12/31/1993
*	2547	SWANTON VILLAGE	SWANTON VILLAGE OF	MOP	4600	3400	VT	MISSISQUOI	05/24/1984	04/30/2024
*	2548	LYONS FALLS	GEORGIA PACIFIC CORP	MON	1050		NY	BLACK	05/10/1979	12/31/1988
*	2548	LYONS FALLS	GEORGIA PACIFIC CORP	MON	2000		NY	BLACK	05/10/1979	12/31/1988
*	2548	LYONS FALLS	GEORGIA PACIFIC CORP	MON	5090		NY	BLACK	05/10/1979	12/31/1988
*	2550	WEYAUWEGA	WISCONSIN ELECTRIC PWR CO	NON	400		WI	WAUPACA	08/26/1968	12/31/1993
*	2551	BUCHANAN	INDIANA AND MICH ELEC CO	MON	4105		MI	ST JOSEPH	12/15/1975	12/31/1993
*	2552	FORT HALIFAX	CENTRAL MAINE POWER CO	NON	1500		ME	SEBASTICOOK	09/12/1968	12/31/1993
*	2554	FEEDER DAM	MOREAU MANUFACTURING CORP	MON	6000		NY	HUDSON	07/31/1968	12/31/1993
*	2555	AUTOMATIC	CENTRAL MAINE POWER CO	NON	800		ME	MESSALONSKEE	08/30/1968	12/31/1993
*	2556	UNION GAS	CENTRAL MAINE POWER CO	NON	1500		ME	MESSALONSKEE	08/30/1968	12/31/1993
*	2557	RICE RIPS	CENTRAL MAINE POWER CO	MON	1600		ME	MESSALONSKEE	02/24/1969	12/31/1993
*	2558	OTTER CREEK	VERMONT MARBLE CO	MON	1400		VT	OTTER CR	02/23/1976	03/31/2012
*	2558	OTTER CREEK	VERMONT MARBLE CO	MON	6930		VT	OTTER CR	02/23/1976	03/31/2012
*	2558	OTTER CREEK	VERMONT MARBLE CO	MON	1600		VT	OTTER CR	02/23/1976	03/31/2012
*	2559	OAKLAND	CENTRAL MAINE POWER CO	MON	2800		ME	MESSALNOSKEE STREAM	02/24/1949	12/31/1993
*	2560	POTATO RAPIDS	WISCONSIN PUB SERV CORP	NON	1380		WI	PESHTIGO	08/22/1968	12/31/1993
*	2561	NIANGUA	SHO ME POWER CORP	MON	3000		MO	NIANGUA	06/11/1975	12/31/1993
*	2564	ORIENTA	LAKE SUPERIOR DIST PWR CO	NON	800		WI	IRON	10/02/1968	12/31/1993
*	2566	WEBBER	CONSUMERS POWER CO	MON	2500		MI	GRAND	03/24/1981	04/01/2001
*	2567	WISSOTA	NORTHERN STATES POWER CO	MON	35280		WI	CHIPPEWA	06/19/1980	06/30/2000
*	2569	BLACK RIVER	NIAGARA MOHAWK POWER CORP	MON	2000		NY	BLACK	09/15/1977	12/31/1993
*	2569	BLACK RIVER	NIAGARA MOHAWK POWER CORP	MON	6000		NY	BLACK	09/15/1977	12/31/1993
*	2569	BLACK RIVER	NIAGARA MOHAWK POWER CORP	MON	5400		NY	BLACK	09/15/1977	12/31/1993
*	2569	BLACK RIVER	NIAGARA MOHAWK POWER CORP	MON	10800		NY	BLACK	09/15/1977	12/31/1993
*	2569	BLACK RIVER	NIAGARA MOHAWK POWER CORP	MON	5400		NY	BLACK	09/15/1977	12/31/1993
*	2570	RACINE L & D	OHIO POWER CO	MON	47500		OH	OHIO	12/27/1973	11/30/2023
*	2572	RIPOGENUS	GREAT NORTHERN PAPER CO	MON	37530		ME	PENOBSCOT W BR	12/02/1969	12/31/1993
*	2574	LOCKWOOD	MILSTAR MFG CORP	MON	4800	1750	ME	KENNEBEC	12/31/1969	12/31/1993
*	2576	HOUSATONIC	CONNECTICUT LT & PWR CO	MON	37200		CT	HOUSATONIC	09/18/1981	07/31/2001
*	2576	HOUSATONIC	CONNECTICUT LT & PWR CO	MON	7200		CT	HOUSATONIC	09/18/1981	07/31/2001
*	2576	HOUSATONIC	CONNECTICUT LT & PWR CO	MON	30000		CT	HOUSATONIC	09/18/1981	07/31/2001
*	2576	HOUSATONIC	CONNECTICUT LT & PWR CO	MON	30500		CT	HOUSATONIC	09/18/1981	07/31/2001

* 2579	TWIN BRANCH	INDIANA AND MICH ELEC CO	MON	7260		IN	ST JOSEPH	06/21/1977	12/31/1993
* 2580	TIPPY	CONSUMERS POWER CO	MON	20000		MI	MANISTEE	04/18/1977	12/31/1993
* 2581	PESHTIGO	WISCONSIN PUB SERV CORP	NON	584		WI	PESHTIGO	08/08/1968	12/31/1993
* 2582	STATION NO 2	ROCHESTER GAS AND EL CORP	MON	6500		NY	GENESEE	06/05/1967	12/31/1993
* 2583	STATION NO 5	ROCHESTER GAS AND EL CORP	MON	38250		NY	GENESEE	07/05/1967	12/31/1993
* 2584	STATION NO 26	ROCHESTER GAS AND EL CORP	MON	3000		NY	GENESEE	06/30/1967	12/31/1993
* 2585	IDOLS	DUKE POWER CO	MON	1410		NC	YADKIN	07/28/1980	07/31/2000
* 2586	GANTT	ALABAMA ELECTRIC COOP INC	MON	1200	1850	AL	CONECUH	05/19/1980	04/30/2005
* 2586	GANTT	ALABAMA ELECTRIC COOP INC	MON	6		AL	CONECUH	05/19/1980	04/30/2005
* 2587	SUPERIOR FALLS	LAKE SUPERIOR DIST PWR CO	NON	1320		WI	MONTREAL	10/09/1968	12/31/1993
* 2588	LITTLE CHUTE	KAUKAUNA CITY OF	MOP	3300		WI	FOX	08/22/1980	07/31/2000
* 2589	MARQUETTE	MARQUETTE CITY OF	MOP	700		MI	DEAD	07/30/1981	07/30/2001
* 2589	MARQUETTE	MARQUETTE CITY OF	MOP	3200		MI	DEAD	07/30/1981	07/30/2001
* 2589	MARQUETTE	MARQUETTE CITY OF	MOP	0		MI	DEAD	07/30/1981	07/30/2001
* 2590	WISCONSIN RIVER DIVISION	CONSOLIDATED WATER PWR CO	MON	1800		WI	WISCONSIN	01/16/1975	06/30/1993
* 2593	BEAVER RIVER	BEAVER FALLS POWER CO	NON	1500		NY	BEAVER	08/26/1968	12/31/1987
* 2594	LAKE CREEK	MONTANA LT AND PWR	MON	4500		MT	LAKE CR	12/16/1981	11/30/2011
* 2595	HIGH FALLS	WISCONSIN PUB SERV CORP	MON	7000		WI	PESHTIGO	01/12/1976	12/31/1993
* 2596	STATION NO 160	ROCHESTER GAS AND EL CORP	NON	340		NY	GENESEE	04/13/1978	12/31/1993
* 2597	FALLS VILLAGE	CONNECTICUT LT & PWR CO	MON	9000		CT	HOUSATONIC	08/28/1981	08/30/2001
* 2599	HODENPYL	CONSUMERS POWER CO	MON	18000		MI	MANISTEE	02/03/1976	12/31/1993
* 2600	STANFORD	BANGOR HYDRO-ELECTRIC CO	MON	3800	9200	ME	PENOBSCOT	06/26/1984	05/31/2024
* 2601	BRYSON	NANTAHALA PWR AND LT CO	MON	980		NC	OCONALUFTEE	07/22/1980	07/31/2005
* 2602	DILLSBORO	NANTAHALA PWR AND LT CO	MON	225		NC	TUCKASEGEE	07/17/1980	07/31/2005
* 2603	FRANKLIN	NANTAHALA PWR AND LT CO	MON	1040		NC	LITTLE TENNESSEE	07/22/1980	07/31/2005
* 2607	SPENCER MOUNTAIN	DUKE POWER CO	MON	640		NC	SOUTH FORK	03/02/1970	12/31/1993
* 2608	WEST SPRINGFIELD	PREMOID CORP ET AL	NON	1400		MA	WESTFIELD	09/09/1968	12/31/1993
* 2609	PALMER FALLS & CURTIS	INTERNATIONAL PAPER CO	MON	5000	10300	NY	HUDSON	05/22/1980	04/30/2000
* 2609	PALMER FALLS & CURTIS	INTERNATIONAL PAPER CO	MON	7500	48000	NY	HUDSON	05/22/1980	04/30/2000
* 2610	SAXON FALLS	LAKE SUPERIOR DIST PWR CO	NON	1250		MI	MONTREAL	12/10/1968	12/31/1989
* 2611	WINSLOW	SCOTT PAPER CO	MON	3730		ME	KENNEBEC	07/01/1969	12/31/1993
* 2612	FLAGSTAFF RES	CENTRAL MAINE POWER CO	MON	0		ME	DEAD	04/12/1979	12/31/1997
* 2613	MOXIE RES	CEN.MAINE POWER CO ET AL	MON	0		ME	MOXIE	06/11/1969	12/31/1993
* 2614	GREENUP	VANCEBURG CITY OF	MOP	70560		OH	OHIO	03/29/1976	02/28/2026
* 2615	BRASSUA RES	CEN.MAINE POWER CO ET AL	MON	0		ME	MOOSE	09/16/1977	12/31/1993
* 2616	HOOSIC	NIAGARA MOHAWK POWER CORP	MON	13120		NY	HOOSIC	01/22/1969	12/31/1993

*	2616	HOOSIC	NIAGARA MOHAWK POWER CORP	MON	4800		NY	HOOSIC	01/22/1969	12/31/1993
*	2618	GRAND LAKE RES	GEORGIA PACIFIC CORP	MON	0		ME	ST CROIX W BR	09/04/1980	09/30/2000
*	2618	GRAND LAKE RES	GEORGIA PACIFIC CORP	MON			ME	WEST BRANCH, ST CROIX	09/04/1980	09/30/2000
*	2619	MISSION	NANTAHALA PWR AND LT CO	MON	1800		NC	HIWASSEE	08/04/1980	08/31/2005
*	2620	LOCKHART	LOCKHART POWER CO	MON	12300		SC	BROAD	04/18/1983	03/31/2000
*	2621	PACOLET S C	PACOLET MANUFACTURING CO	NON	800		SC	PACOLET	02/05/1982	01/31/2012
*	2622	TURNERS FALLS	HAMMERMILL PAPER CO	NON	937		MA	CONNECTICUT CANAL	02/25/1969	02/28/1991
*	2628	R L HARRIS	ALABAMA POWER CO	MON	135000		AL	TALLAPOOSA	12/27/1973	11/30/2023
*	2629	MORRISVILLE	MORRISVILLE VILLAGE OF	MOP		2500	VT	GREEN RIVER	08/28/1981	04/30/2015
*	2629	MORRISVILLE	MORRISVILLE VILLAGE OF	MOP	0		VT	LAMOILLE	08/28/1981	04/30/2015
*	2629	MORRISVILLE	MORRISVILLE VILLAGE OF	MOP	2000		VT	LAMOILLE	08/28/1981	04/30/2015
*	2629	MORRISVILLE	MORRISVILLE VILLAGE OF	MOP	1800		VT	LAMOILLE	08/28/1981	04/30/2015
*	2629	MORRISVILLE	MORRISVILLE VILLAGE OF	MOP	1300		VT	LAMOILLE	08/28/1981	04/30/2015
*	2630	PROSPECT 1,2 & 4	PACIFIC POWER & LIGHT CO	MON	36750		OR	ROGUE	07/28/1980	07/01/2005
*	2631	WORONOCO	HAMMERMILL PAPER CO	MON	2690		MA	WESTFIELD	06/02/1981	09/01/2001
*	2634	GREAT NORTHERN	GT NORTHERN NEKOOSA CORP	NON	0		ME	PENOBSCOT W BR	04/18/1980	04/30/2000
*	2634	GREAT NORTHERN	GT NORTHERN NEKOOSA CORP	NON			ME	CAUCOMGOMOC	04/18/1980	04/30/2000
*	2634	GREAT NORTHERN	GT NORTHERN NEKOOSA CORP	NON			ME	RAGGED	04/18/1980	04/30/2000
*	2634	GREAT NORTHERN	GT NORTHERN NEKOOSA CORP	NON			ME	PENOBSCOT W BR	04/18/1980	04/30/2000
*	2639	CORNELL	NORTHERN STATES POWER CO	MON	30750		WI	CHIPPEWA	12/26/1973	11/30/2023
*	2640	UPPER HYDRO	FLAMBEAU PAPER CORP	NON	900		WI	FLAMBEAU N FK	08/05/1976	12/31/1993
*	2643	BEND	PACIFIC POWER & LIGHT CO	NON	1110		OR	DESCHUTES	03/20/1970	12/31/1993
*	2644	KANSAS RIVER	BOWERSOCK MLS AND PWR CO	MON	1850		KS	KANSAS	03/24/1977	12/31/1987
*	2645	BEAVER	NIAGARA MOHAWK POWER CORP	MON	4800		NY	BEAVER	07/03/1978	12/31/1993
*	2645	BEAVER	NIAGARA MOHAWK POWER CORP	MON	1800		NY	BEAVER	07/03/1978	12/31/1993
*	2645	BEAVER	NIAGARA MOHAWK POWER CORP	MON	4500		NY	BEAVER	07/03/1978	12/31/1993
*	2645	BEAVER	NIAGARA MOHAWK POWER CORP	MON	1500		NY	BEAVER	07/03/1978	12/31/1993
*	2645	BEAVER	NIAGARA MOHAWK POWER CORP	MON	8000		NY	BEAVER	07/03/1978	12/31/1993
*	2645	BEAVER	NIAGARA MOHAWK POWER CORP	MON	6050		NY	BEAVER	07/03/1978	12/31/1993
*	2645	BEAVER	NIAGARA MOHAWK POWER CORP	MON	15000		NY	BEAVER	07/03/1978	12/31/1993
*	2645	BEAVER	NIAGARA MOHAWK POWER CORP	MON	2960		NY	BEAVER	07/03/1978	12/31/1993
*	2651	ELKHART	INDIANA AND MICH ELEC CO	MON	3440		IN	ST JOSEPH	05/08/1980	05/31/2000
*	2652	BIG FORK	PACIFIC POWER & LIGH	MON	4150		MT	SWAN	09/24/1976	04/30/1990

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* 2655	EAGLE & PHENIX	FIELDCREST MILLS INC	MON	4260		GA	CHATTAHOOCHEE	04/29/1975	12/31/1993
* 2659	POWERDALE	PACIFIC POWER & LIGHT CO	MON	6000		OR	HOOD	03/14/1980	02/28/2000
* 2660	FORREST CITY RES	GEORGIA PACIFIC CORP	MON	0		ME	ST CROIX E BR	08/27/1980	08/31/2000
* 2661	HAT CREEK NO 1 & NO 2	PACIFIC GAS AND ELEC CO	MON	10100		CA	HAT CR	10/29/1975	09/30/2000
* 2661	HAT CREEK NO 1 & NO 2	PACIFIC GAS AND ELEC CO	MON	10000		CA	HAT CR	10/29/1975	09/30/2000
* 2662	SCOTLAND	CONNECTICUT LT & PWR CO	MON	2000		CT	SHETUCKET	10/05/1982	08/31/2012
* 2663	PILLAGER	MINNESOTA POWER & LIGHT CO	MON	1520		MN	CROW WING	08/14/1980	05/11/1997
* 2666	MEDWAY	BANGOR HYDRO-ELECTRIC CO	MON	3440		ME	PENOBSCOT W BR	03/29/1979	03/31/1999
* 2669	BEAR SWAMP P S	NEW ENGLAND POWER CO	MON	600000		MA	DEERFIELD RIVER	04/28/1970	03/31/2020
* 2669	BEAR SWAMP P S	NEW ENGLAND POWER CO	MON	11250		MA	DEERFIELD RIVER	04/28/1970	03/31/2020
* 2670	DELLS	N STATES PWR CO & CITY OF EAU CLAIRE	MOP	10200		WI	CHIPPEWA	09/30/1980	09/20/2000
* 2671	MOOSEHEAD LAKE	KENNEBEC WATER POWER CO	NON	0		ME	KENNEBEC	08/05/1976	12/31/1993
* 2674	VERGENNES NO 9	GREEN MOUNTAIN POWER CORP	MON	2400		VT	OTTER CR	06/29/1979	05/31/1999
* 2677	BADGER-RAPIDE CROCHE	KAUKAUNA CITY OF	MOP	2000		WI	FOX	06/07/1977	10/31/1988
* 2677	BADGER-RAPIDE CROCHE	KAUKAUNA CITY OF	MOP	3600		WI	FOX	06/07/1977	10/31/1988
* 2677	BADGER-RAPIDE CROCHE	KAUKAUNA CITY OF	MOP	2400		WI	FOX	06/07/1977	10/31/1988
* 2680	LUDINGTON P. S.	CONSUMERS & DETROIT EDISON	MON	1657500		MI	LAKE MICHIGAN	07/30/1969	06/30/2019
* 2684	ARPIN	NORTH CENTRAL POWER CO	NON	1570		WI	CHIPPEWA EAST FK	06/03/1969	04/30/2019
* 2685	BLENHEIM&GILBOA P S	POWER AUTHORITY OF THE STATE OF NY	MOP	1000000		NY	SCHOHARIE CR	06/06/1969	04/30/2019
* 2686	WEST FORK	NANTAHALA PWR AND LT CO	MON	3000		NC	TUCKASEGEE W FK	01/28/1981	01/30/2006
* 2686	WEST FORK	NANTAHALA PWR AND LT CO	MON	21600		NC	TUCKASEGEE W FK	01/28/1981	01/30/2006
* 2687	PIT NO 1	PACIFIC GAS AND ELEC CO	MON	63000		CA	FALL CR	11/06/1970	12/31/1995
* 2689	OCONTO FALLS	SCOTT PAPER CO	NON	1860		WI	OCONTO RIVER	01/18/1973	12/31/1993
* 2692	NANTAHALA	NANTAHALA PWR AND LT CO	MON	43200		NC	NANTAHALA	02/06/1981	02/28/2006
* 2694	QUEENS CREEK	NANTAHALA PWR AND LT CO	NON	1440		NC	QUEENS CREEK	10/20/1976	09/30/2001
* 2696	STUYVESANT FALLS	NIAGARA MOHAWK POWER CORP	MON	2800		NY	KINDERHOOK CR	08/07/1980	08/30/2005
* 2697	CEDAR FALLS	NORTHERN STATES POWER CO	MON	6000		WI	RED CEDAR RIVER	01/06/1981	01/30/2001
* 2698	EAST FORK	NANTAHALA PWR AND LT CO	MON	10800		NC	TUCKASEGEE E FK	01/23/1981	02/01/2006
* 2698	EAST FORK	NANTAHALA PWR AND LT CO	MON	9000		NC	TUCKASEGEE E FK	01/23/1981	02/01/2006
* 2698	EAST FORK	NANTAHALA PWR AND LT CO	MON	6375		NC	TUCKASEGEE E FK	01/23/1981	02/01/2006
* 2699	ANGELS	PACIFIC GAS AND ELEC CO	NON	1400		CA	ANGELS CR	11/06/1970	12/31/1995
* 2701	TRENTON FALLS & PROSPECT	NIAGARA MOHAWK POWER CORP	MON	24200	6000	NY	CANADA CR W	03/18/1983	02/28/2023
* 2701	TRENTON FALLS & PROSPECT	NIAGARA MOHAWK POWER CORP	MON	17325		NY	CANADA CR W	03/18/1983	02/28/2023
* 2705	NEWHALEM	SEATTLE DEPT OF LIGH	MOP	1750		WA	NEWHALEM CR	01/01/1970	12/31/1994

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* 2709	DAVIS P S	MONONGAHELA PWR CO E T AL	MON		1000000	WV	BLACKWATER RIVER	04/21/1977	03/31/2027
* 2710	ORONO	BANGOR HYDRO-ELECTRIC CO	MON	2332		ME	STILLWATER	11/10/1977	12/31/1993
* 2711	TREGO	NORTHERN STATES POWER CO	MON	1200		WI	NAMEKAGON	03/11/1977	03/31/1993
* 2712	STILLWATER	BANGOR HYDRO-ELECTRIC CO	MON	1950		ME	PENOBSCOT STILLWATER BR	08/10/1978	12/31/1993
* 2713	OSWEGATCHIE	NIAGARA MOHAWK POWER CORP	MON	15000		NY	OSWEGATCHIE	01/10/1983	12/31/2012
* 2713	OSWEGATCHIE	NIAGARA MOHAWK POWER CORP	MON	6000		NY	OSWEGATCHIE	01/10/1983	12/31/2012
* 2713	OSWEGATCHIE	NIAGARA MOHAWK POWER CORP	MON	2680		NY	OSWEGATCHIE	01/10/1983	12/31/2012
* 2713	OSWEGATCHIE	NIAGARA MOHAWK POWER CORP	MON	2700		NY	OSWEGATCHIE	01/10/1983	12/31/2012
* 2713	OSWEGATCHIE	NIAGARA MOHAWK POWER CORP	MON	1040	0	NY	OSWEGATCHIE	01/10/1983	12/31/2012
* 2713	OSWEGATCHIE	NIAGARA MOHAWK POWER CORP	MON	560	0	NY	OSWEGATCHIE	01/10/1983	12/31/2012
* 2715	COMBINED LOCKS	KAUKAUNA CITY OF	MON	2890		WI	FOX	09/23/1980	09/30/2000
* 2716	BATH COUNTY	VIRGINIA ELECTRIC & POWER CO	MON		2100000	VA	LITTLE BACK CR	01/10/1977	08/31/2026
* 2720	STURGEON FALLS	NORWAY CITY OF	MOP	3500	1800	WI	MENOMINEE	08/31/1984	07/31/2004
* 2721	HOWLAND	BANGOR HYDRO-ELECTRIC CO	MON	1875		ME	PISCATAQUIS	09/12/1980	09/30/2000
* 2722	PIONEER	UTAH POWER & LIGHT CO	MON	5000		UT	OGDEN	10/10/1980	08/31/2000
* 2724	HAMILTON	HAMILTON CITY OF	MOP	1500		OH	MIAMI	09/04/1981	09/29/2001
* 2725	ROCKY MOUNTAIN P S	GEORGIA POWER CO	MON		675000	GA	HEATH CREEK	01/21/1977	12/31/2026
* 2726	MALAD	IDAHO POWER CO	MON	13500		ID	MALAD	08/09/1979	07/31/2004
* 2726	MALAD	IDAHO POWER CO	MON	7200		ID	MALAD	08/09/1979	07/31/2004
* 2727	ELLSWORTH-GRAHAM	BANGOR HYDRO-ELECTRIC CO	MON	8900		ME	UNION	04/12/1977	12/31/1987
* 2727	ELLSWORTH-GRAHAM	BANGOR HYDRO-ELECTRIC CO	MON	0		ME	UNION	04/12/1977	12/31/1987
* 2731	WEYBRIDGE	CENTRAL VERMONT PUBLIC SERVICE CORP	MON	3000		VT	OTTER	05/02/1980	05/30/2000
* 2735	HELMS PUMPED STORAGE	PACIFIC GAS AND ELEC CO	MON		1050000	CA	HELMS CR	05/18/1976	04/30/2026
* 2736	AMERICAN FALLS	IDAHO POWER CO	MON	92400		ID	SNAKE	03/31/1975	02/28/2025
* 2737	MIDDLEBURY&LOWER	CENTRAL VERMONT PUBLIC SERVICE CORP	MON	2250		VT	OTTER CREEK	07/08/1980	07/01/2000
* 2738	SARANAC	NEW YORK ST EL AND G CORP	MON	6400	6460	NY	SARANAC	09/23/1980	04/12/2006
* 2738	SARANAC	NEW YORK ST EL AND G CORP	MON	6273		NY	SARANAC	09/23/1980	04/12/2006
* 2738	SARANAC	NEW YORK ST EL AND G CORP	MON	2400	3000	NY	SARANAC	09/23/1980	04/12/2006
* 2738	SARANAC	NEW YORK ST EL AND G CORP	MON	14100	6460	NY	SARANAC	09/23/1980	04/12/2006
* 2739	MELDAHL	VANCEBURG CITY OF	MOP		70300	KY	OHIO	03/05/1982	02/29/2032
* 2740	BAD CREEK P.S.	DUKE POWER CO	MON		1000000	SC	WHITEWATER	08/01/1977	07/31/2027
* 2741	PINE FLAT	KINGS RIVER CONSERVATION DIST	MON	165000		CA	KINGS RIVER	09/25/1979	08/31/2029
* 2742	SOLOMON GULCH	COPPER VALLEY ELEC ASSN INC	MON	18000		AK	SOLOMON	06/21/1978	05/31/2028
* 2743	TERROR LAKE	ALASKA POWER AUTHORITY	MON		20000	AK	TERROR	10/05/1981	10/31/2031

*	2744	PARK MILL & MENOMINEE	MENOMINEE COMPANY	MON	1744		WI	MENOMINEE	03/11/1985	02/28/2015
*	2744	PARK MILL & MENOMINEE	MENOMINEE COMPANY	MON	2240		WI	MENOMINEE	03/11/1985	02/28/2015
*	2758	CROCKER MILL	LINWEAVE INC	NON	280		MA	HOLYOKE CANAL	06/07/1977	02/28/1991
*	2761	UPPER MOUNTAIN	EL DORADO COUNTY WATER AGENCY &	MOP		42700	CA	PLUM CRK TRIB TO S FK AMER RIVER	12/31/1984	11/30/2034
*	2761	UPPER MOUNTAIN	EL DORADO COUNTY WATER AGENCY &	MOP		6900	CA	SOUTH FORK AMERICAN RIVER	12/31/1984	11/30/2034
*	2761	UPPER MOUNTAIN	EL DORADO COUNTY WATER AGENCY &	MOP		60800	CA	SOUTH FORK AMERICAN RIVER	12/31/1984	11/30/2034
*	2766	ALBION (D WHEEL)	LINWEAVE INC	NON	400		MA	HOLYOKE CANAL	07/06/1977	02/28/1991
*	2768	ALBION (A WHEEL)	LINWEAVE INC	NON	250		MA	HOLYOKE CANAL	07/06/1977	02/28/1991
*	2769	RAYSTOWN LAKE	ALLEGHENY ELECTRIC COOPERATIVE INC	MON		20300	PA	JUNIATA	11/10/1982	10/30/2032
*	2770	CROCKER MILL	LINWEAVE INC	NON	240		MA	HOLYOKE CANAL	07/06/1977	02/28/1991
*	2771	NONOTUCK MILL	LINWEAVE INC	NON	400		MA	HOLYOKE CANAL	07/06/1977	02/28/1991
*	2772	LINWEAVE(A WHEEL)	LINWEAVE INC	NON	460		MA	HOLYOKE CANAL	07/06/1977	02/28/1991
*	2775	LINWEAVE(D WHEEL)	LINWEAVE INC	NON	360		MA	HOLYOKE CANAL	07/19/1977	02/28/1991
*	2777	UPPER SALMON	IDAHO POWER CO	MON	34500		ID	SNAKE	06/13/1979	05/31/1999
*	2778	SHOSHONE FALLS	IDAHO POWER CO	MON	12400		ID	SNAKE	06/13/1979	05/31/1999
*	2780	MONTICELLO	SOLANO IRRIGATION DIST	MOP		11500	CA	PUTAH CR	01/29/1981	01/01/2031
*	2782	RED CREEK	PAROWAN CITY CORPORATION	NOP	500		UT	RED CREEK	04/13/1978	04/30/2003
*	2788	COLLIERSVILLE	F W E STAPENHORST INC	NON	1450		NY	SUSQUEHANNA	03/13/1979	02/28/2019
*	2790	LOWELL HYDRO	BOOTT HYDROPOWER INC	MON	1250	1110	MA	EASTERN CANAL	04/13/1983	04/30/2023
*	2790	LOWELL HYDRO	BOOTT HYDROPOWER INC	MON	1080		MA	EASTERN CANAL	04/13/1983	04/30/2023
*	2790	LOWELL HYDRO	BOOTT HYDROPOWER INC	MON	2100	400	MA	EASTERN CANAL	04/13/1983	04/30/2023
*	2790	LOWELL HYDRO	BOOTT HYDROPOWER INC	MON	1180		MA	HAMILTON CANAL	04/13/1983	04/30/2023
*	2790	LOWELL HYDRO	BOOTT HYDROPOWER INC	MON	530	265	MA	MERRIMACK CANAL	04/13/1983	04/30/2023
*	2790	LOWELL HYDRO	BOOTT HYDROPOWER INC	MON		15000	MA	MERRIMACK	04/13/1983	04/30/2023
*	2794	PICKELL, J.W.	PICKELL JACK W	NON	20		ID	SLAUGHTER CREEK	08/16/1979	08/30/2006
*	2800	LAWRENCE	LAWRENCE HYDRO ASSOC	MON	16800		MA	MERRIMACK	12/04/1978	11/30/2028
*	2801	GLENDALE	HEATHER MARY C	NON	240	160	MA	HOUSATONIC	11/23/1979	10/31/2009
*	2804	GOOSE	MAINE HYDRO DEV CORP	NON		200	ME	GOOSE	03/24/1980	02/29/2020
*	2804	GOOSE	MAINE HYDRO DEV CORP	NON	94		ME	GOOSE	03/24/1980	02/29/2020
*	2804	GOOSE	MAINE HYDRO DEV CORP	NON	55		ME	GOOSE	03/24/1980	02/29/2020
*	2804	GOOSE	MAINE HYDRO DEV CORP	NON		75	ME	GOOSE	03/24/1980	02/29/2020
*	2804	GOOSE	MAINE HYDRO DEV CORP	NON	0		ME	GOOSE	03/24/1980	02/29/2020
*	2808	BARKERS MILL	MAINE HYDRO DEV CORP	NON	1500		ME	LITTLE ANDROSCOGGIN	02/23/1979	01/31/2019
*	2809	AMERICAN TISSUE	GARDINER HYDRO COMPANY	NON	900		ME	COBBOSSEECONTEE	05/09/1979	04/30/2019
*	2814	GREAT FALLS	PATERSON MUN UTIL AUTH	MOP	10950	7500	NJ	PASSAIC	03/11/1981	02/28/2021
*	2816	NORTH HARTLAND	NORTH HARTLAND HYD ASSOC	MON		4000	VT	OTTAUQUECHEE RIVER	11/24/1981	11/30/2021
*	2818	GREEN LAKE	SITKA CITY & BOROUGH OF	MOP	16500		AK	VODOPAD	04/05/1979	03/31/2029
*	2821	PORTLAND NO 1 & NO 2	PORTLAND CITY OF	MOP	23750		OR	BULL RUN	03/22/1979	02/28/2029
*	2821	PORTLAND NO 1 & NO 2	PORTLAND CITY OF	MOP	11875		OR	BULL RUN	03/22/1979	02/28/2029
*	2823	BOISE CASCADE	BEAVER FALLS POWER CO	NON	1000		NY	BEAVER	10/18/1979	09/30/2019
*	2829	LOVELAND	LOVELAND CITY OF	NOP	900		CO	BIG THOMPSON R	06/30/1978	03/07/2016
*	2832	LUCKY PEAK	BOISE PROJ BD OF CONTROL	MON		87480	ID	BOISE	06/10/1980	05/31/2030
*	2835	RAINBOW FALLS	NEW YORK ST EL AND G CORP	MON	2112		NY	AUSABLE	11/26/1982	10/31/2002

* 2835	RAINBOW FALLS	NEW YORK ST EL AND G CORP	MON	0		NY	BLACK BROOK	11/26/1982	10/31/2002
* 2837	GRANBY	NIAGARA MOHAWK POWER CORP	MON	10000		NY	OSWEGO	04/07/1980	03/31/2020
* 2839	GREAT FALLS	LYNDONVILLE VILLAGE OF	NOP	2050		VT	PASSUMPSIC	06/29/1979	05/31/2019
* 2840	P.E.C. HEADWORKS	QUINCY-COLUMBIA BASIN IRRIGAT DIST	MOP		6500	WA	POTHOLES EAST CANAL	09/21/1982	09/30/2032
* 2841	LAKE MENDOCINO	UKIAH CITY OF	MOP		3500	CA	EAST FORK RUSSIAN RIVER	04/01/1982	03/31/2032
* 2842	IDAHO FALLS	IDAHO FALLS CITY OF	MOP	11000		ID	SNAKE	02/08/1979	01/31/2029
* 2842	IDAHO FALLS	IDAHO FALLS CITY OF	MOP	8000		ID	SNAKE	02/08/1979	01/31/2029
* 2842	IDAHO FALLS	IDAHO FALLS CITY OF	MOP	8000		ID	SNAKE	02/08/1979	01/31/2029
* 2848	CASCADE	IDAHO POWER CO	MON	12800		ID	PAYETTE N FK	02/17/1981	01/31/2031
* 2849	MAIN CANAL HEADWORKS	QUINCY-COLUMBIA BASIN IRRIGAT DIST	MOP		26000	WA	MAIN CANAL	11/16/1981	11/30/2031
* 2850	EMERYVILLE	HAMPSHIRE PAPER COMPANY	MON	1740		NY	OSWEGATCHIE	06/17/1982	05/31/2012
* 2851	NATURAL DAM	JAMES RIVER-GROVETON INC	NON	1020		NY	OSWEGATCHIE	04/13/1982	04/30/2012
* 2852	KEUKA LAKE	NEW YORK ST EL AND G CORP	MON	2000		NY	KEUKA, WANETA& LAMOKA LAKES/MUD CRK	03/14/1983	02/28/2003
* 2853	BROADWATER	MONTANA DEPT OF NATURAL RES & CONS	MOP		10000	MT	MISSOURI RIVER	04/23/1984	03/31/2024
* 2854	OLD RIVER	VIDALIA TOWN OF	MOP		192000	LA	MISSISSIPPI RIVER	01/27/1982	12/31/2031
* 2861	PONTOOK	PONTOOK HYDRO PARTNERS	MON		8575	NH	ANDROSCOGGIN	10/02/1981	09/30/2031
* 2866	LOCKPORT	METRO SAN DIST GR CHICAGO	MOP	13500		IL	CHICAGO SAN & SHIP CANAL	12/04/1981	11/30/2001
* 2874	BARREN RIVER	GLASGOW CITY OF	MOP		6750	KY	BARREN RIVER	09/16/1983	08/31/2033
* 2879	BOLTON FALLS	GREEN MOUNTAIN POWER CORP	MON		8790	VT	WINOOSKI	02/05/1982	01/31/2022
* 2880	CHEROKEE FALLS	BROAD RIVER EL COOP &	MON		3500	SC	BROAD RIVER	08/03/1981	07/31/2021
* 2883	FRIES	RIEGAL TEXTILE CORP	MON	7017		VA	NEW RIVER	06/10/1980	06/01/2020
* 2888	WHISKEY TOWN	REDDING CITY OF	MOP		3240	CA	CLEAR CREEK	03/10/1983	02/28/2023
* 2890	DINKEY CREEK	KINGS RIVER CONSERVATION DIST	MOP		120000	CA	KINGS	03/22/1982	02/29/2032
* 2891	JACKSON BLUFF	TALLAHASSEE CITY OF	MOP		10900	FL	OCHLOCKONEE	07/14/1982	06/30/2022
* 2892	FRIANT POWER PROJECT	FRIANT POWER AUTHORITY	MOP		40000	CA	SAN JOAQUIN RIVER	09/30/1982	08/31/2032
* 2893	SAXTONS RIVER	BSR COMPANY INC	NON		1500	VT	SAXTONS RIVER	03/11/1982	02/29/2032
* 2894	BLACK BROOK	NORTHWESTERN WIS ELEC CO	NON	650		WI	APPLE	01/22/1980	12/31/2020
* 2897	SACCARAPPA	S D WARREN COMPANY	NON	1350		ME	PRESUMPSCOT	10/31/1979	10/01/1999
* 2901	HOLCOMB ROCK	OWENS-ILLINOIS INC	MON	1875		VA	JAMES	01/29/1981	01/31/2001
-* 2902	BIG ISLAND	OWENS-ILLINOIS INC	NON	480		VA	JAMES	12/08/1980	01/01/2001
* 2903	NEW HOGAN	CALAVERAS COUNTY WATER DISTRICT	MOP		2500	CA	CALAVERAS RIVER	11/22/1982	10/31/2032
* 2905	ENOSBERG FALLS	VERMONT PUB PWR SUP AUTH	MOP	750	2000	VT	MISSISQUOI RIVER	07/12/1983	04/30/2023
* 2907	DRY CREEK	SAVAGE TERRY & CELIA	NON		12	MT	DRY CREEK	09/26/1979	08/31/2029
* 2911	SWAN LAKE	ALASKA POWER AUTHORITY	MOP	22000		AK	FALLS CREEK	07/17/1980	07/01/2030
=* 2916	LOWER MOKELUMNE	EAST BAY MUNICIPAL UTIL DIST	MOP	18750	9900	CA	MOKELUMNE RIVER	03/10/1981	03/31/2031
* 2916	LOWER MOKELUMNE	EAST BAY MUNICIPAL UTIL DIST	MOP		10680	CA		03/10/1981	03/31/2031

*	2922	MOLIN	GLASGOW CITY OF	MOP			KY	KENTUCKY RIVER	10/03/1984	09/30/2034
*	2923	GREEN RIVER	GLASGOW CITY OF	MOP		11000	KY	GREEN RIVER	09/25/1984	08/31/2034
*	2926	RUSSELL D. SMITH	QUINCY-COLUMBIA BASIN IRRIGAT DIST	MOP	6111		WA	POTHOLES EAST CANAL	03/27/1980	02/28/2030
*	2927	AQUAMAC	AQUAMAC CORPORATION	NON	250		MA	MERRIMACK CANAL	10/31/1979	09/30/1999
*	2928	MERRIMACK	MERRIMACK PAPER COMPANY	NON	538		MA	MERRIMACK CANAL	12/27/1979	10/30/1999
*	2928	MERRIMACK	MERRIMACK PAPER COMPANY	NON	550		MA	MERRIMACK CANAL	12/27/1979	10/30/1999
*	2930	NORTH FORK PAYETTE RIVER	IDAHO POWER CO	MON		99000	ID	NORTH FORK PAYETTE RIVER	06/28/1982	05/31/2032
*	2930	NORTH FORK PAYETTE RIVER	IDAHO POWER CO	MON		174000	ID	NORTH FORK PAYETTE RIVER	06/28/1982	05/31/2032
*	2931	GAMBO	S D WARREN COMPANY	MON	1900		ME	PRESUMPSCOT	09/30/1980	09/30/2000
*	2932	MALLISON FALLS	S D WARREN COMPANY	MON	800		ME	PRESUMPSCOT	05/14/1980	05/31/2000
*	2934	UPPER MECHANICVILLE	NEW YORK ST EL AND G CORP	MON	16800		NY	HUDSON	04/23/1981	03/31/2021
*	2935	GRANITEVILLE	GRANITEVILLE COMPANY	NON	1200		GA	AUGUSTA CANAL	10/26/1981	09/30/2001
*	2937	QUINCY CHUTE	QUINCY-COLUMBIA BASIN IRRIGAT DIST	MOP	7800		WA	WEST CANAL OF US BR	08/20/1982	07/31/2032
*	2941	LITTLE FALLS	S D WARREN COMPANY	NON	1000		ME	PRESUMPSCOT	05/28/1980	05/31/2000
*	2942	DUNDEE	S D WARREN COMPANY	MON	2400		ME	PRESUMPSCOT	09/17/1981	09/30/2001
*	2952	GEM STATE	IDAHO FALLS CITY OF	MOP	0	22300	ID	SNAKE RIVER	12/12/1983	11/30/2023
*	2954	GIBRALTER	SANTA BARBARA CITY OF	NOP	1500		CA	SANTA YNEZ R	04/13/1981	04/01/2031
*	2955	NORMANSKILL	WATERVLIET CITY OF	NOP	1250		NY	NORMANS KILL	03/05/1982	02/28/2022
*	2958	MADERA CANAL	MADERA-CHOWCHILLA POWER AUTHORITY	MOP	0	1800	CA	MADERA CANAL	06/08/1982	05/31/2032
*	2958	MADERA CANAL	MADERA-CHOWCHILLA POWER AUTHORITY	MOP	0	675	CA	MADERA CANAL	06/08/1982	05/31/2032
*	2958	MADERA CANAL	MADERA-CHOWCHILLA POWER AUTHORITY	MOP	0	800	CA	MADERA CANAL	06/08/1982	05/31/2032
*	2960	GONZALES	GONZALES CITY OF	NOP	1140		TX	GUADALUPE	08/25/1980	07/31/2020
*	2964	STURGIS	STURGIS CITY OF	MOP	2720		MI	ST JOSEFH RIVER	04/17/1980	03/31/2000
*	2966	CLEMENT DAM	KATSEKAS J & DIMOS Z	MON	2400		NH	WINNIPESAUKEE RIVER	05/17/1982	04/30/2032
*	2972	WOONSOCKET	WOODSOCKET CITY OF	NOP	1100		RI	BLACKSTONE RIVER	11/06/1980	11/30/2020
*	2975	SAND BAR	TRI-DAM POWER AUTHORITY	MOP		15600	CA	MIDDLE FORK STANISLAUS RIVER	09/08/1983	08/31/2033
*	2978	BROWN BRIDGE	TRAVERSE CITY LIGHT & POWER BOARD	NOP	830		MI	BOARDMAN RIVER	09/24/1984	08/31/2014
*	2984	EEL WEIR	S D WARREN COMPANY	MON	1800		ME	PRESUMPSCOT	03/16/1984	03/31/2004
*	2985	WILLOW MILL	MEAD CORP	NON	100		MA	HOUSATONIC	05/01/1981	04/30/2011
*	2987	CORNWELL	CORNWELL HOWARD W & VERNA JEAN	NON		12	CA	MERRIL	05/07/1980	04/30/2030
*	2997	CAMP FAR WEST	SOUTH SUTTER WATER DISTRICT	MOP		6800	CA	BEAR RIVER	07/02/1981	07/01/2021
*	3010	CENTERVILLE	VALLEY INDUSTRIES INC	NON		155	RI	S.BRANCH PAWTUXET	01/25/1983	12/31/2022
*	3011	ARCTIC	ARCTIC DEVELOPMENT CORP	NON	440		RI	PAWTUXET RIVER	01/25/1983	12/21/2022
*	3012	SAYBROOKE	SAYBROOKE MFG CO	NON		235	RI	SOUTH BRANCH PAWTUXET	01/25/1983	12/31/2023
*	3013	NATICK	QUIDNIC RESERVOIR CO	NON		522	RI	PAWTUXET RIVER	07/06/1983	06/30/2023
*	3015	TYEE LAKE	ALASKA POWER AUTHORITY	MOP	20000		AK	TYEE LAKE	08/05/1981	07/31/2031
*	3017	JETTY LAKE	SMITH PETER E & FLETCHER HENRY M	NON	50		AK	JETTY LAKE	07/17/1980	06/30/2030
*	3021	ALLEGHENY L&D 8&9	ALLEGHENY ELECTRIC CORPORATION INC	MON		13000	PA	ALLEGHENY RIVER	03/27/1985	02/28/2035

* 3021	ALLEGHENY L&D 8&9	ALLEGHENY ELECTRIC CORPORATION INC	MON		17400	PA	ALLEGHENY RIVER	03/27/1985	02/28/2035
* 3023	TUPPERWARE	DART INDUSTRIES	MON	1724		RI	BLACKSTONE	10/24/1980	09/30/2020
* 3024	HOLLYWOOD	RICHMOND CITY OF	MOP	2075		VA	JAMES RIVER-KANAWHA CANAL	08/06/1982	07/31/2002
* 3025	KELLEYS FALLS	HYDRO RESOURCES CORP	MON		450	NH	PISCATAQUOG RIVER	04/24/1984	03/31/2024
* 3026	BLUE MARSH	DELEWARE RIVER BASIN COMM AND	MOP		1260	PA	TULPEHOCKEN CREEK	04/19/1984	03/31/2034
* 3029	BYRD PARK	RICHMOND CITY OF	MOP	1125		VA	JAMES	08/12/1982	07/31/2002
* 3030	ELK RAPIDS	ANTRIM COUNTY	MOP	700		MI	ELK	02/09/1981	03/01/2001
* 3031	GARLAND CANAL	SHOSHONE IRRIGATION DISTRICT	MOP	2610		WY	GARLAND CANAL	10/09/1981	09/30/2031
* 3033	DAM NO. 2	ARKANSAS ELECTRIC COOP CORP &	MON		120000	AR	ARKANSAS RIVER	08/10/1983	07/31/2033
* 3034	LOCK AND DAM NO.3	ARKANSAS ELECTRIC COOP &	MON		48000	AR	ARKANSAS RIVER	08/10/1983	07/31/2033
* 3036	NORTH MISSISSIPPI	MUNICIPAL ENERGY AGENCY OF MISS	MOP		7700	MS	COLDWATER RIVER	04/15/1983	03/31/2033
* 3036	NORTH MISSISSIPPI	MUNICIPAL ENERGY AGENCY OF MISS	MOP		16000	MS	LITTLE TALLAHATCHIE RIVER	04/15/1983	03/31/2033
* 3036	NORTH MISSISSIPPI	MUNICIPAL ENERGY AGENCY OF MISS	MOP		7500	MS	YACONA RIVER	04/15/1983	03/31/2033
* 3036	NORTH MISSISSIPPI	MUNICIPAL ENERGY AGENCY OF MISS	MOP		13200	MS	YALOBUSHA RIVER	04/15/1983	03/31/2033
* 3037	ELIZABETH WEBBING MILLS	ROOSEVELT HYDRO ELECTRIC COMPANY	MON	700		RI	BLACKSTONE RIVER	07/13/1981	06/30/2021
* 3038	SUCCESS	LOWER TULE RIVER IRR DIST	MOP		1400	CA	TULE RIVER	08/22/1983	07/31/2033
* 3041	HETTINGER	MACKAY BAR CORP	MON	12		ID	SMITH CR	11/14/1980	10/31/2010
* 3043	LOCK & DAM NO. 13	ARKANSAS ELECTRIC COOP CORP &	MON		33200	AR	ARKANSAS RIVER	10/18/1983	09/30/2033
* 3044	LOCK & DAM NO. 9	ARKANSAS ELECTRIC COOP CORP &	MOP		42400	AR	ARKANSAS RIVER	07/20/1983	06/30/2033
* 3052	BLACK RIVER FALLS	BLACK RIVER FALLS CITY OF	MOP	920		WI	BLACK RIVER	08/28/1981	08/30/2001
* 3063	CENTRAL FALLS	GELARDIN BRUNER COTT INC	MON	818		RI	BLACKSTONE RIVER	08/28/1981	07/31/2021
* 3073	CLIFFORD ROSENBALM	ELLIS WAYNE R	MON	8		ID	BEAR CR	10/31/1980	12/31/2004
* 3074	UPRIVER	SPOKANE CITY OF	MOP	14400	9000	WA	SPOKANE	06/04/1981	05/31/2031
* 3083	KAW	KAMO ELECTRIC COOP INC	MON		37000	OK	ARKANSAS RIVER	11/27/1984	10/31/2034
* 3090	VAIL STATION	LYNDONVILLE VILLAGE OF	MOP	350		VT	PASSUMPSIC	01/23/1981	02/01/2001
* 3102	HIGH SHOALS	BRACEWELL GAYNOR L	MON		1000	GA	APALACHEE	08/07/1981	08/30/2021
* 3107	NEWFOUND	NEWFOUND HYDROELEC CO	MON		1487	NH	NEWFOUND RIVER	11/06/1981	10/31/2031
* 3131	BROCKWAYS MILLS	WILLIAMS RIVER ELEC CORP	MON		1115	VT	WILLIAMS RIVER	01/20/1983	12/31/2032
* 3133	ERROL	PSNH & UNION WTR PWR CO	MON		2010	NH	ANDROSCOGGIN RIVER	08/29/1983	07/31/2023
* 3155	CARBONTON DAM	COX LAKE-CARBONTON ASSOCIATES	MON		1000	NC	DEEP RIVER	07/09/1982	06/30/2022
* 3156	WORTHVILLE DAM	JORDAN JOHN M	MON	0	280	NC	DEEP RIVER	10/28/1982	09/30/2022
* 3163	RANDOLPH MILLS NO. 2	JORDAN JOHN M	MON		144	NC	DEEP RIVER	09/28/1984	08/31/2024
* 3174	VALLECITO	PTARMIGAN RESOURCES & ENERGY INC	MON		2350	CO	LOS PINOS RIVER	10/05/1983	09/30/2033
* 3189	ROCK CREEK	KEATING JOSEPH M	MON		3000	CA	ROCK CREEK	04/29/1983	03/31/2033
* 3190	BLACK BUTTE	SANTA CLARA CITY OF	MOP		6800	CA	STONY CREEK	05/05/1983	04/30/2033
* 3193	STONY GORGE	SANTA CLARA CITY OF	MOP	0	3900	CA	STONY CREEK	08/31/1982	07/31/2032

* 3195	SAYLES FLAT	KEATING JOSEPH M	MON		2950	CA	SOUTH FORK AMERICAN RIVER	09/26/1983	08/31/2033
* 3203	MAYO DAM	JORDAN JOHN M	MOP	0	500	NC	MAYO RIVER	10/18/1982	09/30/2022
* 3206	NEW MARTINSVILLE	NEW MARTINSVILLE CITY OF	MOP		34000	OH	OHIO RIVER	06/04/1984	05/31/2034
* 3207	CONEMAUGH	SALTSBURG BOROUGH OF & SEE REMARKS	MON		14000	PA	CONEMAUGH RIVER	06/16/1982	05/31/2032
* 3211	HINCKLEY	POWER AUTHORITY OF THE STATE OF NY	MOP		9000	NY	WEST CANADA CREEK	08/12/1982	07/31/2002
* 3228	MAHONING	ATLANTIC POWER DEVELOPMENT CORP	MON		5000	PA	MAHONING CREEK	01/26/1984	12/31/2034
* 3240	ROLFE CANAL	BRIAR-HYDRO ASSOCIATES	MON		3360	NH	CONTOOCOOK RIVER	12/05/1984	11/30/2024
* 3251	CORNELL UNIVERSITY	CORNELL UNIVERSITY	NON	1500		NY	FALL CREEK	07/28/1981	06/30/2021
* 3253	CAMPTON HYDRO	MAD RIVER POWER ASSOC	NON		382	NH	MAD RIVER	11/09/1982	10/31/2022
* 3255	LYONSDALE	LYONSDALE ASSOCIATES	MON	3000		NY	MOOSE RIVER	03/22/1983	02/28/2023
* 3267	BALLARD MILL	GREATER MALONE COMMUNITY COUNCIL IN	NON	125	150	NY	SALMON RIVER	04/19/1982	03/31/2022
* 3273	CHITTENDEN FALLS	CHITTENDEN FALLS HYDRO POWER INC	NON		550	NY	KINDERHOOK CREEK	06/29/1981	05/31/2021
* 3286	BEAR CREEK	PUGET SOUND POWER & LIGHT CO	MON		4000	WA	BEAR CREEK	12/12/1983	11/30/2023
* 3292	CLARION	HYDRO CORPORATION OF AMERICA	MON		2450	PA	CLARION RIVER, EAST BRANCH	08/20/1984	07/31/2034
* 3295	SUMMER FALLS	SOUTH COLUMBIA IRRIGATION DISTRICT	MOP	74000		WA	MAIN CANAL	08/14/1981	07/31/2031
* 3307	TIONESTA LAKE	TIONESTA ASSOCIATES	MON		5000	PA	TIONESTA CREEK	01/26/1984	12/31/2033
* 3309	NASH MILL	COHEN ARTHUR	NON		200	NH	ASHUELOT RIVER	12/30/1982	11/30/2022
* 3342	PENACOOK LOWER	NEW HAMPSHIRE HYDRO ASSC	MON	4000		NH	CONTOOCOOK RIVER	11/17/1982	10/31/2022
* 3351	WARM SPRINGS	SONOMA COUNTY WATER AGENCY	MOP		3000	CA	DRY CREEK	12/18/1984	11/30/2034
* 3409	BOYNE RIVER DAM	BOYNE USA INC	NON		250	MI	BOYNE RIVER	02/22/1982	01/31/2022
* 3410	WOODS LAKE	WOODS LAKE RANCH	NON	30	0	CO	LIME CREEK	02/01/1983	01/31/2003
* 3435	MILLWOOD	HOPE CITY OF	MOP		3600	AR	LITTLE RIVER	05/24/1984	04/30/2034
* 3442	MINE FALLS	NASHUA CITY OF	MOP		3032	NH	NASHUA RIVER	08/04/1983	07/31/2023
* 3449	MURRAY LOCK & DAM NO. 7	NORTH LITTLE ROCK CITY OF	MOP		36800	AR	ARKANSAS RIVER	08/17/1983	07/31/2033
* 3450	EASTVALE	BEAVER FALLS MUNICIPAL AUTHORITY	NOP		440	PA	BEAVER RIVER	12/15/1983	11/30/2023
* 3451	TOWNSEND	BEAVER FALLS MUNICIPAL AUTHORITY	MOP		3250	PA	BEAVER RIVER	08/17/1984	07/31/2024
* 3452	OAK ORCHARD	NIAGARA MOHAWK POWER CORP	NON	350		NY	OAK ORCHARD CREEK	07/15/1981	07/01/2021
* 3472	WYRE-WYND	SOUTHWIRE COMPANY	MON		2745	CT	QUINEBAUG RIVER	05/19/1982	05/01/2022
* 3475	JOHN W. FLANNAGAN	CLINTWOOD TOWN OF	MOP		7000	VA	POUND RIVER	03/11/1985	02/28/2035
* 3494	ALLEGHENY LOCK & DAM #5	NOAH CORP	MON		7500	PA	ALLEGHENY RIVER	07/19/1984	06/30/2034
* 3509	LITTLE FALLS	LITTLE FALLS HYDROELECTRIC ASSOC	MON		13600	NY	MOHAWK RIVER	09/19/1983	08/31/2023
* 3511	GROVEVILLE	UAH GROVEVILLE HYDRO ASSOCIATES	MON	1655		NY	FISHKILL CREEK	06/04/1982	05/31/2022
* 3512	BRAENDLY HYDRO	GOODMAN DAVID & OLIGER GEORGE R	NON		940	NY	FISHKILL CREEK	01/26/1984	12/31/2024
* 3516	HART LAKE	HART CITY OF	NOP	160	0	MI	PENTWATER RIVER	10/29/1982	09/30/2002
* 3562	BARKERS MILL UPPR	BARKER HYDRO COMPANY	NON		950	ME	LITTLE ANDROSCOGGIN	08/22/1983	07/31/2023
* 3603	RUEDI	ASPEN CITY OF & PITKEN COUNTY	MOP		3200	CO	FRYINGPAN RIVER	09/08/1983	08/31/2033

* 3633	BRIGHTON	ALTERNATIVE ENERGY ASSOCIATES	MON	100	480	MD	PATUXENT RIVER	09/21/1984	08/31/2024
* 3671	LOCK AND DAM NO 5	MITEX INC & CENTRAL CITY BOROUGH	MON		15000	PA	ALLEGHENY RIVER	10/15/1984	09/30/2034
* 3706	MUSSERS DAM	AMERICAN HYDRO POWER CO	NON	340		PA	MIDDLE CREEK	07/30/1982	06/30/2022
* 3755	ECHO WATER POWER	BOUNTIFUL CITY OF	MOP		4500	UT	WEBER RIVER	12/07/1984	11/30/2034
* 3756	EAST CANYON	BOUNTIFUL CITY OF	MOP		2000	UT	EAST CANYON CREEK	08/24/1984	07/31/2034
* 3777	ROLLINSFORD	ROLLINSFORD TOWN OF	NOP	1492		NH	SALMON FALLS ROVER	09/18/1981	08/31/2021
* 3816	SOUTHSIDE CANAL	ENERGENICS SYSTEMS INC	MON		3950	CO	SOUTHSIDE CANAL	05/05/1983	04/30/2033
* 3819	MT ELBERT	ENERGENICS SYSTEMS INC	MON		2800	CO	MT. ELBERT CONDUIT	11/18/1982	10/31/2032
* 3820	SOMERSWORTH	GENERAL ELECTRIC COMPANY	NON	1500		NH	SALMON FALLS RIVER	09/29/1981	08/31/2021
* 3842	E.B.C. 4.6 POWER PLANT	QUINCY-COLUMBIA BASIN IRRIGAT DIST	MOP	2200		WA	ELTOPIA BRANCH CANAL	12/09/1981	12/31/2031
* 3843	P.E.C. 66.0 POWER PLANT	QUINCY-COLUMBIA BASIN IRRIGAT DIST	MOP	2300		WA	POTHOLES EAST CANAL	12/09/1981	12/31/2031
* 3893	SLY PARK	EL DORADO IRRIGATION DISTRICT	NOP		850	CA	SLY PARK CREEK	07/27/1984	06/30/2034
* 3939	RAY ROBERTS DAM	DENTON CITY OF	NOP		1000	TX	TRINITY RIVER	03/20/1985	02/28/2035
* 3940	LEWISVILLE DAM	DENTON CITY OF	MOP		2000	TX	TRINITY RIVER	03/27/1984	02/28/2034
* 4021	LAKE TAHOMA	SARANAC ENERGY CORPORATION	NON	240	0	NC	BUCK CREEK	07/14/1982	06/30/2022
* 4025	SHINGLE CREEK	KOYLE JOHN H	NON	224	120	ID	N FORK AND S FORK OF SHINGLE CREEK	09/30.1981	08/31/2031
* 4026	AZISCOHOS	ANDROSCOGGIN RESERV CO	MON		5200	ME	MAGALLOWAY RIVER	04/17/1985	03/31/2025
* 4108	ST. CLOUD	ST CLOUD CITY OF	MOP		8860	MN	MISSISSIPPI RIVER	12/05/1984	11/30/2024
* 4117	COLEBROOK	METROP DIST OF HARTFORD	MOP		2500	CT	WEST BRANCH FARMINGTON	03/27/1984	02/28/2034
* 4129	RIO BRAVO	OLCESE WATER DISTRICT	MOP		7120	CA	KERN RIVER	09/20/1983	08/31/2033
* 4202	LOWELL TANNERY	PUMPKIN HILL HYDRO CO	NON		875	ME	PASSADUMKEAG RIVER	10/31/1983	09/30/2023
* 4285	LOGAN RIVER #2	LOGAN CITY OF	MOP		3265	UT	LOGAN RIVER	09/21/1984	08/31/2031
* 4306	MISSISSIPPI LOCK & DAM NO. 2	HIBBING CITY OF	MOP		4000	MN	MISSISSIPPI RIVER	07/11/1983	06/30/2033
* 4316	BLUE VALLEY RANCH	TRANS MOUNTAIN HYDRO CORPORATION	NON		130	CO	BLUE RIVER	07/06/1983	06/30/2023
* 4334	PHILADELPHIA	LONG LAKE ENERGY CORP	MON		3000	NY	INDIAN RIVER	02/17/1983	01/31/2023
* 4354	OWYHEE DAM POWER	OWYHEE PROJ IRR DISTS	MOP		3500	OR	OWYHEE RIVER	05/09/1984	04/30/2034
* 4357	CLIFTON NO 2	TUSCARORA YARNS INC	NON			SC	PACOLET RIVER	09/28/1984	08/31/2024
* 4362	RIVERDALE	INMAN MILLS	NON		1240	SC	ENOREE RIVER	09/29/1982	08/31/2012
* 4428	WALDEN	WALDEN POWER CORPORATION	MON		2824	NY	WALLKILL RIVER	06/15/1982	05/31/2022
* 4444	BLUE VALLEY RANCH	TRANS MOUNTAIN HYDRO CORP	NON		190	CO	BLUE RIVER	05/02/1984	04/30/2024
* 4451	LOWER GREAT FALLS	SOMERSWORTH HYDROPOWER &	NON	1289		NH	SALMON FALLS RIVER	04/22/1982	04/31/2022
* 4472	SARANAC RIVER	NIAGARA MOHAWK POWER CORP	MON		48500	NY	SARANAC RIVER	07/27/1984	06/30/2024
* 4472	SARANAC RIVER	NIAGARA MOHAWK POWER	MON			NY	SARANAC RIVER	07/27/1984	06/30/2024

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* 4506	BLOOMINGTON	WESTERNPORT CITY OF	MOP		13850	MD	NORTH BRANCH POTOMAC	12/20/1983	11/30/2033
* 4597	PINE VIEW	WEBER-BOX ELDER CONS DIST	MOP		1800	UT	OGDEN RIVER	03/16/1984	02/28/2034
* 4639	CHRISTINE FALLS	LONG LAKE ENERGY CORP	NON		725	NY	SACANDAGA RIVER	10/18/1983	09/30/2023
* 4641	DANNER-FENSTER	DANNER GEORGE & FENSTER JAMES P	NON		12	AK	UNNAMED CREEK	08/28/1981	07/31/2031
* 4678	CRESCENT	POWER AUTHORITY OF THE STATE OF NY	MOP	5600	6400	NY	MOHAWK RIVER	06/26/1984	05/31/2024
* 4679	VISCHER FERRY	POWER AUTHORITY OF THE STATE OF NY	MOP	5600	6000	NY	MOHAWK RIVER	06/26/1984	05/31/2024
* 4718	COCHECO FALLS	COCHECO FALLS ASSOCIATES	NON		700	NH	COCHECO RIVER	12/08/1982	11/30/2023
* 4749	MILL CREEK	WALKER LARRY S	NON		1860	WA	POTHOLES EAST CANAL	10/05/1983	09/30/2033
* 4750	ELTOPIA BRANCH CANAL	ENERGENICS SYSTEMS INC	NON		682	WA	ELTOPIA BRANCH CANAL	09/09/1983	08/31/2033
* 4784	PREJEPSCOT	ANDROSCOGGIN WTR PWR CO	MON	2500	7525	ME	ANDROSCOGGIN RIVER	09/16/1982	08/31/2022
* 4796	GLEN PARK	NIAGARA MOHAWK & GLEN PARK ASSOC	MON	0	15490	NY	BLACK RIVER	12/29/1982	11/30/2032
* 4800	MOON LAKE	BOUNTIFUL CITY OF	MOP		4725	UT	LAKE FORK RIVER	06/10/1983	05/31/2033
* 4856	LONG PARK	UTAH BOARD OF WATER RESOURCES	MOP		7000	UT	SHEEP CREEK	06/21/1984	05/31/2024
* 4881	BARBER DAM	ADA CO BOISE CITY OF & BLOOM A L	MON		4140	ID	BOISE RIVER	12/23/1983	11/30/2023
* 4885	TWIN FALLS	SOUTHFORK RESOURCES INC	MON		20000	WA	SOUTH FORK SNOQUALMIE RIVER	05/06/1985	04/30/2035
* 4914	DE PERE	NICOLET PAPER COMPANY	NON	1122	0	WI	FOX RIVER	12/31/1984	11/30/2004
* 5000	KAYUTA	TAFT LAWRENCE R	NON		400	NY	BLACK RIVER	09/12/1984	08/31/2024
* 5044	SIBLEY MILL	GRANITEVILLE COMPANY	MON	2475		GA	AUGUSTA CANAL - SAVANNAH RIVER	04/15/1983	03/31/2003
* 5058	TEHAMA-COLUSA/GLEN-COLUSA INTERTIE	GLEN-COULSA IRRIGATION DIST	MON		2952	CA	TEHAMA-COLUSA/GLEN-COLUSA INTERTIE	04/15/1985	03/31/2035
* 5073	BENTON FALLS	WHITMAN EVERETTE E	MON		3400	ME	SEBASTICOOK RIVER	03/08/1984	02/28/2034
* 5089	FELT	FALL RIVER RURAL ELEC COOP INC	MON		7500	ID	TETON RIVER	09/09/1983	08/31/2023
* 5124	NORTH BRANCH NO.3	WASHINGTON ELECTRIC COOPERATIVE INC	NON	1000		VT	WINOOSKI RIVER	11/23/1982	10/30/2022
* 5227	HORSE CREEK	TIFT ROBERT RAYMOND	NON		1200	CA	HORSE CREEK	02/06/1984	01/31/2034
* 5261	NEWBURY	NEWSBURY HYDRO COMPANY	NON	285		VT	WELLS RIVER	09/08/1983	08/31/2023
* 5283	CARGILL FALLS	KALE MANUFACTURING CO	NON		1360	CT	QUINEBAUG RIVER	08/29/1983	07/31/2023
* 5297	MANVILLE	FORTE BROTHERS INC	NON		1240	RI	BLACKSTONE RIVER	08/29/1983	07/31/2023
* 5312	WESTFIR	J R FERGUSON & ASSOCIATES	MON		3000	OR	N FORK MIDDLE FORK WILLAMETTE RIVER	03/03/1983	02/28/2033
* 5313	DEWEYS MILLS	HYDRO ENERGIES CORP	MON		1840	VT	OTTAUQUECHEE RIVER	01/20/1983	12/31/2032
* 5334	FORD LAKE	JOINT YPSILANTI RECREATION ORGAN	MON	1920		MI	HURON RIVER	10/07/1983	09/30/2003
* 5357	MITCHELL BUTTE	NORTH BOARD OF CNTRL OWYHEE PROJ ID	NOP		1500	OR	MITCHELL BUTTE LATERAL	12/14/1984	11/30/2034
* 5362	LOWER MOUSAM	KENNEBUNK LT & PWR D	NOP	150	0	ME	MOUSAM RIVER	04/16/1982	03/31/2022

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* 5362	LOWER MOUSAM	KENNEBUNK LT & PWR DIST	NOP	300	0	ME	MOUSAM RIVER	04/16/1982	03/31/2022
* 5362	LOWER MOUSAM	KENNEBUNK LT & PWR DIST	NOP	150	0	ME	MOUSAM RIVER	04/16/1982	03/31/2022
* 5362	LOWER MOUSAM	KENNEBUNK LT & PWR DIST	NOP	0	375	ME	MOUSAM RIVER	04/16/1982	03/31/2022
* 5596	BEDFORD	BEDFORD CITY OF	MOP	1090	4800	VA	JAMES RIVER	05/20/1983	04/30/2023
* 5598	MILTON LEATHER BD	EAST COAST ENGINEERING	NON		600	NH	SALMON FALLS RIVER	12/30/1982	11/30/2022
* 5667	WEARE RESERVOIR	EAST COAST ENGINEERING	NON		114	NH	PISCATAQUOG RIVER	01/20/1983	12/31/2022
* 5668	NORTH TROY	VERMONT PUB PWR SUP AUTH	NOP		600	VT	MISSISQUOI RIVER	12/05/1983	11/30/2023
* 5679	METALS SELLING	METALS SELLING CORP	NON		450	CT	QUINEBAUG RIVER	08/30/1984	07/31/2024
* 5702	BARNET	BARNET HYDRO COMPANY	NON		530	VT	STEVENS RIVER	08/06/1982	07/31/2032
* 5728	SANDY HOLLOW	SANDY HOLLOW HYDRO ASSOCIATES	NON		515	NY	INDIAN RIVER	03/22/1983	02/28/2023
* 5765	MADERA CANAL MILE 24.2 (DRY CREEK)	MADERA-CHOWCHILLA POWER AUTHORITY	NOP		275	CA	MADERA CANAL	09/08/1983	08/31/2033
* 5867	ALICE FALLS	LONG LAKE ENERGY CORP	MON		1960	NY	AUSABLE RIVER	10/05/1983	09/30/2023
* 5891	OPAL SPRINGS	DESCHUTES VALLEY WATER DISTRICT	MOP		4900	OR	CROOKED RIVER	11/02/1982	10/31/2032
* 5906	NORTH CANAL	NORTH CANAL WATERWORKS	MON	2520		MA	MERRIMACK NORTH CANAL	08/11/1982	07/31/2002
* 5927	GOOSE CREEK	GOOSE CREEK HYDRO ASSOC	NON		350	VA	GOOSE CREEK	03/04/1985	02/28/2025
* 5944	MORETOWN NO. 8	WASHINGTON ELEC GEN & TRAN COOP INC	NON		800	VT	MAD RIVER	12/07/1982	11/30/2023
* 5946	LOWELL ATLANTIC	MASSACHUSETTS HYDRO ASSC	NON	500		MA	LAWRENCE CANAL	12/30/1983	11/30/2003
* 5983	LOST CREEK	MORGAN CITY CORPORATION	NOP		600	UT	LOST CREEK	10/07/1983	09/30/2033
* 6058	HAILESBORO NO. 4	HYDRO DEVELOPMENT GROUP INC	NON	1490		NY	OSWEGATCHIE RIVER	01/10/1983	12/31/2002
* 6059	FOWLER NO. 7	HYDRO DEVELOPMENT GROUP INC	NON	900		NY	OSWEGATCHIE RIVER	11/29/1982	10/31/2002
* 6115	PYRITES	HYDRO DEVELOPMENT GROUP INC	MON	1200	6000	NY	GRASS RIVER	09/23/1983	08/31/2023
* 6120	CAMP CREEK	FRONTIER LAND AND POWERR	NON		990	CA	CAMP CREEK	12/29/1982	11/30/2022
* 6220	TOKUL CREEK	WEYERHAEUSER CO	MON		3500	WA	TOKUL CREEK	03/29/1984	02/28/2034
* 6240	WATSON DAM	WEBSTER JOHN M	NON		182	NH	COCHECO RIVER	09/08/1983	08/31/2023
* 6398	HACKETT MILLS	HACKETT MILLS HYDRO ASSC	NON		470	ME	LITTLE ANDROSCOGGIN	09/12/1984	08/31/2024
* 6418	A.J. ALLEN	BURFORD JUDITH A	NON		17	CO	EAST BRUSH CREEK	08/10/1983	07/31/2003
* 6440	LAKEPORT	LAKEPORT HYDROELEC ASSOC	NON		600	NH	WINNEPESAUKEE RIVER	09/08/1983	08/31/2023
* 6470	WINOOSKI NO. 8	WINOOSKI HYDROELECTRIC CO	NON		550	VT	WINOOSKI RIVER	08/29/1983	07/31/2023
* 6597	MONADNOCK	MONADNOCK PAPER MILLS	MON	750		NH	CONTOOCOOK RIVER	08/27/1984	07/31/2014
* 6597	MONADNOCK	MONADNOCK PAPER MILLS	MON	770		NH	CONTOOCOOK RIVER	08/27/1984	07/31/2014
* 6597	MONADNOCK	MONADNOCK PAPER MILLS	MON	425		NH	CONTOOCOOK RIVER	08/27/1984	07/31/2014
* 6597	MONADNOCK	MONADNOCK PAPER MILLS	MON	0	0	NH	CONTOOCOOK RIVER	08/27/1984	07/31/2014
* 6614	PLEASANT OAK MAIN	EL DORADO IRRIGATION	NOP		250	CA	PLEASANT OAK MAI	07/06/1984	06/30/2034

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* 6687	RESERVOIR NO.3	EL DORADO IRRIGATION DISTRICT	NOP		950	CA	EL DORADO MAIN NO.2	07/12/1983	06/30/2033
* 6689	PENACOOK UPPER	PENACOOK HYDRO ASSOC	MON		2800	NH	CONTOOCOOK RIVER	12/05/1984	11/30/2024
* 6759	APALACHE	AQUENERGY SYSTEMS INC	NON		335	SC	SOUTH FORK TYGER RIVER	08/21/1984	07/31/2024
* 6916	STRONTIA SPRINGS	DENVER CITY & COUNTY OF	NOP		950	CO	SOUTH PLATTE RIVER	01/13/1984	12/31/2024
* 6951	TALLASSEE SHOALS HYDRO	OGLETHORPE POWER CORP	MON		1900	GA	MIDDLE OCONEE RIVER	10/24/1983	09/30/2023
* 7000	NEWTON FALLS	NEWTON FALLS PAPER MILL INC	MON		1540	NY	OSWEGATCHIE RIVER	02/28/1984	01/31/2004
* 7000	NEWTON FALLS	NEWTON FALLS PAPER MILL INC	MON		680	NY	OSWEGATCHIE RIVER	02/28/1984	01/31/2004
* 7153	VICTORY MILLS	SNC HYDRO INC	NON		1237	NY	FISH CREEK	05/15/1984	04/30/2024
* 7161	GALESVILLE	DOUGLAS COUNTY	MON		1800	OR	COW CREEK	06/29/1984	05/31/2034
* 7175	WOODRUFF NARROWS	WYOMING HYDRO INC	MON		2500	WY	BEAR RIVER	09/06/1984	08/31/2024
* 7186	SHELDON SPRINGS	MISSISQUOI ASSOCIATES	MON	4300	17800	VT	MISSISQUOI RIVER	11/02/1984	09/30/2024
* 7188	MURPHY	PSNH & NH WATER RES BRD	MON		2250	NH	CONNECTICUT RIVER	08/10/1984	07/31/2024
* 7189	GREEN LAKE	GREEN LAKE WATER PWR CO	NON		375	ME	REEDS BROOK	04/05/1984	03/31/2024
* 7214	SPRING CREEK	SMITH LANE	MON		7000	WA	SPRING CREEK	09/28/1984	08/31/2034
* 7252	HIGH LINE CANAL	SANTA CLARA CITY OF	NOP		350	CA	HIGH LINE CANAL SOUTH CANAL	07/17/1984	06/30/2034
* 7266	TAYLOR PARK HYDRO	COLORADO HYDRO-POWER CORP	MON		3600	CO	TAYLOR RIVER	05/02/1984	04/30/2034
* 7269	JIM BOYD POWER PROJECT	BOYD JAMES B AND JANET A	NON		1095	OR	UMATILLA RIVER	07/09/1984	06/30/2034
* 7281	LATERAL 6.2	MADERA IRRIGATION DISTRICT	NOP		850	CA	MADERA CANAL	12/28/1983	11/30/2033
* 7337	COWICHE	YAKIMA-TIETON IRRIGATION DISTRICT	NOP		1350	WA	USBR YAKIMA-TIETON CANAL	07/06/1984	06/30/2034
* 7338	ORCHARD AVENUE	YAKIMA-TIETON IRRIGATION DISTRICT	MOP		2785	WA	IRRIGATION SYSTEM	07/06/1984	06/30/2034
* 7373	MARTINSVILLE	BOERI JAY(JOHN L) JR	NON		250	VT	LULLS BROOK	12/28/1984	11/30/2034
* 7410	PETERBOROUGH	AMERICAN HYDRO POWER CO	NON		364	NH	NUBANUSIT BROOK	08/15/1984	07/31/2034
* 7410	PETERBOROUGH	AMERICAN HYDRO POWER CO	NON		246	NH	NUBANUSIT BROOK	08/15/1984	07/31/2034
* 7483	MOUNDS	WILLOW RIVER HYDRO ASSOCIATES	NON		490	WI	WILLOW RIVER	02/28/1985	01/31/2025
* 7484	LITTLE FALLS	WILLOW RIVER HYDRO ASSOCIATES	NON		270	WI	WILLOW RIVER	02/26/1985	01/31/2025
* 7528	CANAAN	PUBLIC SERVICE CO OF N H	NON	1100		VT	CONNECTICUT RIVER	08/24/1984	07/31/2009
* 7563	WEEKS FALLS	SOUTH FORK II INC	MON		3400	WA	SOUTH FORK SNOQUALMIE RIVER	04/25/1985	03/31/2035
* 7725	BARTON VILLAGE	BARTON VILLAGE ELEC DEPT	NOP	1400		VT	CLYDE RIVER	10/11/1984	09/30/2004
* 7748	WATERFORD	POWER AUTHORITY OF THE STATE OF NY	NOP		3000	NY	HUDSON RIVER	03/11/1985	02/28/2025
* 7961	PETTYBORO BROOK	MCHUGH ROBERT	NON		58	NH	PETTYBORO BROOK	12/31/2034	
* 8277	OTIS	OTIS HYDROELECTRIC CO	MON	10350		ME	ANDROSCOGGIN RIVER	09/19/1984	09/30/1999
* 8315	SARTELL DAM	ST REGIS CORP	MON		9500	MN	MISSISSIPPI RIVER	03/13/1985	02/28/2025
* 8428	MONTAGUE WASTEWTR	MONTAGUE TOWN OF	NOP		4	MA		04/15/1985	

APPENDIX II

Additional Material Submitted for the Record

Statement of

UTAH POWER AND LIGHT COMPANY

James C. Taylor, President

June 25, 1985

Before the Senate Energy and Natural Resources
Committee, Subcommittee on Water and Power
hearings on S426 and other bills dealing
with the relicensing of hydroelectric projects.

Utah Power & Light serves approximately 500,000 customers in Utah, Idaho and Wyoming, three of the country's fastest growing states. Our service area covers about 90,000 square miles.

We welcome the opportunity to submit this statement since UP&L has been involved in the hydroelectric relicensing controversy from its very beginning. The issue of a relicensing preference was initially raised by the city of Bountiful, Utah, in its application to take over UP&L's Weber hydroelectric plant. The Company filed its application for a new license on the Weber plant in 1969, since the initial license was scheduled to expire in 1970. Five years later Bountiful filed an application for the license, mostly duplicated from UP&L's submittal. In 1980 the Federal Power Commission issued opinion No. 88, the "Bountiful Case," in which it held that when Congress enacted the Federal Power Act in 1920 it did intend to provide a municipal preference on relicensing. Appeals were filed and some time later the appellate court declined to overturn the initial Commission decision. Subsequently, the Federal Energy Regulatory Commission issued opinion No. 191, which reversed the Bountiful decision. In that opinion, the "Merwin Case," FERC decided that there was no municipal preference on relicensing and awarded the license to the existing licensee, Pacific Power & Light.

This chain of events illustrates the present state of confusion and demonstrates clearly why legislation must be passed by Congress to make certain that there is no municipal preference in hydro relicensing.

Utah Power & Light owns and operates 18 hydroelectric plants, primarily along the Bear River in Idaho and Utah. Besides the Weber plant, UP&L has 13 other facilities whose licenses will expire in the next 20 years. The Company's ownership of those plants will remain in jeopardy until Congress makes a clear statement in the public interest through passage of S426.

The need for competition is represented by the municipalities as a reason why they should have preference in relicensing in addition to all the other preferences they receive. In our area cities with their own power systems already receive inexpensive hydro power from the Colorado River Storage Project, despite the fact that all tax payers—including UP&L customers—paid for the CRSP and other such projects and presumably should share in the benefits. Municipalities also receive the benefits of substantial tax exemption and lower interest rates, benefits which investor-owned companies do not get. If UP&L's hydro plants are pirated away, the benefits would go to a few thousand citizens of small cities that have their own electric systems at the expense of almost 500,000 customers throughout our three-state service area.

The fact is, investor-owned electric utilities are regulated entities serving segments of the public just as public systems serve other segments of the public. If competition is the objective of municipalities, then the present advantages enjoyed by the public systems—tax benefits, lower interest rates, and citizen subsidized power costs—should be eliminated. Indeed, if fair competition is the goal, then the current rights to use the nation's federally generated power, rights currently enjoyed only by the small minority of consumers served by public power systems, should be eliminated. The people presently served by investor-owned companies should have the same access to the low-cost power generated on public streams as the people living in communities with public power systems.

In 1920 Congress had two basic reasons for authorizing preferential treatment for municipalities in connection with the original licenses on hydroelectric projects.

1. It assumed that cities would use hydroelectric power for public purposes such as street lighting and water distribution. It was not forseen that municipalities would build systems to attract heavy commercial consumption, let alone residential use. Many municipalities have entered the utility business in a big way by using mark-ups on cheap hydroelectric power to generate profits and subsidies for other city projects.

2. At the time of the passage of the 1920 Federal Power Act legislators were greatly concerned about monopolistic practices. Congress had just begun work on regulatory measures with regard to utilities and the 1920 Act was passed for its immediate effect. Since only the original licensing of resources was at issue, application of the preference doctrine was not seen as involving any existing facilities or as having any major adverse impact on private utility companies or their customers. It was not forseen that the preference doctrine would later be twisted to allow expropriation of valuable capital assets by municipalities at the expense of most of the nation's power consumers.

The contention that original licensees knew that they would have to give up their facilities when their license expires is nonsense. The framers of the 1920 provision did not envision the unfair consequences their work would have on relicensing in cases 50 years later. A relicensing involves facilities which have already been paid for and which are a part of an integrated power system. That power is relied upon to supply the electricity needs of the vast majority of the country's electricity consumers.

To say that the loss of small hydro projects by large utilities would hardly be noticed by their customers is also fallacious. Utah Power & Light generates 95% of its energy from coal and only 5% from hydro but that hydro power is our cheapest source of energy, since the plants were paid for long ago and there is no cost for fuel. The loss of hydro capacity would require construction of replacement capacity sooner than would otherwise be necessary. Higher rates would be the inevitable result.

Utah Power & Light has proven that it can operate an integrated system in which hydro plants play a vital role. Such plants add to reliability of electric service since those with storage capacity are used to provide important peak power. In addition they provide start-up power when the company's steam plants must be brought back on line after service interruptions.

Utah Power & Light is unfortunate in not having an abundance of hydroelectric resources, but we make use of every kilowatt hour of hydro generation available to us. Our customers appreciate these savings which are passed on to them because of hydro's lower operating costs. We, therefore, urge that everything possible be done to assure passage of S426 during this Congressional session.

Thank you for the opportunity to submit this statement.

BEFORE THE

WATER AND POWER SUBCOMMITTEE

OF THE

ENERGY AND NATURAL RESOURCES COMMITTEE

UNITED STATES SENATE

WASHINGTON, D.C.

JUNE 11, 1985

STATEMENT OF

THE HONORABLE HARVEY B. GANTT
MAYOR, CITY OF CHARLOTTE, NORTH CAROLINA

IN SUPPORT OF S. 426
"ELECTRIC CONSUMERS PROTECTION ACT OF 1985"

Mr. Chairman and Members of the Subcommittee, I greatly appreciate this opportunity to appear before you today to discuss the procedure for the relicensing of hydroelectric facilities and to explain the reasons for my support of S. 426, "Electric Consumers Protection Act of 1985."

For the record, I am Harvey B. Gantt, Mayor of the City of Charlotte, North Carolina. I attended Iowa State University; received a Bachelor of Architecture degree from Clemson University and a Master of City Planning degree from Massachusetts Institute of Technology. I was elected to the Charlotte City Council in 1973; elected Mayor Pro-Tem in 1981; and elected Mayor in 1983.

Charlotte, with a population of 329,000, is the largest city between Washington and Atlanta; the largest city within the nation's fifth largest urban region. Mecklenburg County, in which Charlotte is located, has a population of 421,000 with a projected growth to 464,000 by the year 1990 and 522,000 by the year 2000. Charlotte's urban region, the Piedmont Crescent, is one of the nation's leading industrial areas. Charlotte serves as the financial, distribution and transportation center for the Carolinas. Its major trading area ranks first in the south and eighth in the nation.

Charlotte has developed rapidly over the last five years as an important center for regional headquarters of major national and international companies. A number of national corporations have selected Charlotte for sales offices, division headquarters, research and development facilities, and various administrative units. The city ranks seventh in the United States as a regional sales center for national firms. 308 of the Fortune 500 firms have facilities in Charlotte.

Economic growth in Charlotte continues strong. In the past ten years, 1,479 new firms were established in Charlotte-Mecklenburg - creating 28,126 new jobs and investing over $1.3 billion. In 1984, 354 new and expanded firms created 7,903 jobs, absorbed 7.7 million square feet of space and invested $384.9 million in Mecklenburg County.

Charlotte is a financial center. Banking resources in Mecklenburg County total $25.7 billion...an amount which exceeds any comparable area between Philadelphia and Dallas.

Twenty of the twenty-three million-plus population markets lie within a 600 mile radius of Charlotte...a reasonable distance for 24-hour delivery by truck or about an hour jet time - one day by truck or one hour by air to reach over 50% of the U.S. population and 62% of total U.S. income.

The national trend of population movement toward the sunbelt is confirmed by recent studies. North Carolina ranks sixth nationally in numerical population gains since 1970.

As you can see, Charlotte is a vibrant growing area which requires, for its continued economic health, a guaranteed supply of electricity to meet our expanding needs.

Duke Power Company, which serves the Piedmont Carolinas, has done and continues to do an outstanding job in meeting this need. Duke Power is the eighth largest investor-owned electric utility in the nation and serves approximately 1.4 million customers in a 20,000 square mile area of North and South Carolina. Please allow me to give you some information about Duke Power, one of the finest corporate citizens in our area.

They have consistently had the most efficient fossil-fuel-fired generating system in the nation. For 12 out of the last 14 years - through 1983 (latest year available), it has been No. 1 in efficiency in the United States. It has ranked first for the last 10 straight years. In addition, out of a total of more than 2,000 fossil units in the nation, six out of the ten most efficient units belonged to Duke Power in 1983. Of special importance is that Duke Power was the most efficient overall generating system (fossil and nuclear) in the country in 1983.

Duke Power's 12-year-old Oconee Nuclear Station has generated more kilowatt-hours than any nuclear power plant in the United States. The Nuclear Regulatory Commission (NRC) adjudged Oconee the most efficient pressurized-water reactor nuclear plant in the nation for three consecutive years. Through 1984, Oconee had saved Duke customers $790,692,000 as compared with generation from the Belews Creek coal-fired plant, which is the most efficient in the nation. These savings include all operating and capital costs for Oconee and Belews Creek.

Compared to the average rates for the total electric industry, which includes all government-owned power, Duke's electric rates to consumers are 19.2% lower.

The average Duke residential customer's bill, as a percentage of the total household budget, has remained about the same since 1955. Dr. Willard T. Carleton of the University of North Carolina, Chapel Hill, found that in 1955 Duke's average residential bill was 4% of the average manufacturing wage of a North Carolina worker. In that year, the average household used 468 kwh per month. In 1981, twenty-six years later, he found that the average household bill from Duke Power was still 4% of that year's average manufacturing wage. Yet the average residence used 898 kwh per month in 1981, almost twice as much electricity as in 1955 for the same portion of income.

Dr. Carleton's study has not been updated, but there is every reason to believe that his conclusions would maintain through 1984 when customer residential use had risen to an average of 1,017 kwh per month.

Efficient operations mean lower than otherwise electric bills. Also, rates will be lower than otherwise if Duke can minimize the need to build new, high-cost generating facilities. Toward that end, Duke Power has developed and is pursuing what many have acclaimed as the most aggressive load management program in the United States. Another way to put it is that Duke is actively preaching conservation and is being successful.

They started their load management program in 1976, and with hard work, have stayed right on their projected goals. To date, they have saved 1.8 million kilowatts on summer peak and 2.3 million kilowatts on winter peak - kilowatts of capacity that will never have to be built. They expect to stay on target toward reaching a 1995 goal of saving over 6 million kilowatts of demand, equating to six new large power plants that will never have to be built and billions of dollars of new capital that will never have to be raised to build those plants and will not have to be reflected in electric bills to consumers.

But with the best in efficiency and conservation, further generating capacity must be built if they are to meet a growing load in the Piedmont Carolinas. Load growth has slowed to slightly less than 3% per year compounded, compared to 10% per year in the 1960s and early 1970s. That would seem a small rate of growth, but 3% compounded means that Duke will be serving a load that is 34% greater ten years from now than today's load. This, of course, will require substantial additional generating, transmission and distribution capacity.

This brings me to the hydro relicensing issue. This bill would have a definite effect on Duke Power Company which in turn would affect not only the City of Charlotte but the entire Piedmont Carolinas. Duke Power currently has 26 dams on line (25 conventional hydro stations and one very large pumped storage station). These facilities provide important peaking power capacity to the Duke system. Should, at the relicensing stage, as early as 1993 for some units, Duke Power be divested of this valuable, relatively inexpensive source of power, replacement generation would have to be provided - replacement of power, which I might add, uses no fuel. The cost nationally to ratepayers of investor-owned utilities to pay for replacement power has been estimated to be as high as $4.3 billion per year. Also, taxes would increase. Investor-owned utilities contribute a significant share to local and state treasuries for taxes on these hydro facilities. The lost revenue would have to be made up elsewhere.

Hydro power serves all the customers of the Duke service area. The loss of this valuable resource to a municipality, simply because it is a municipality - not because it can better utilize these facilities, would certainly not be in the public interest. Investor-owned utilities serve 77% of all electricity consumers in the United States; municipalities serve 12%.

Presently, one of the most efficient power companies in this country faces the prospect of increased demand (as indicated by the projected growth of the area they serve) along with the possible loss of valuable peaking capacity which must be replaced. Where will this replacement power come from? It will come from the pockets of ratepayers. Duke Power did not become one of the most efficient and well-managed power companies in this nation by accident. Years of hard work and planning went into and continues to go into the complex job of supplying adequate, reasonably-priced, reliable electric power to more than 4.3 million people. Hydro power plays an important role in Duke Power's ability to continue in this vein. Loss of this vital part of Duke's system would be catastrophic and would reverberate into many other areas of the economy of Charlotte and the Piedmont Carolinas.

Uncertainty obviously exists regarding the applicability of preference in the relicensing of existing hydroelectric projects. The matter should be clarified through legislative action. Utilities that have developed hydroelectric power plants assumed the initial risks of developing these projects. The customers of these utilities are paying or have paid for the construction and maintenance of these projects. Often the total efficiency of a utility depends not only on the individual units in the system but the combined use of these units.

I urge you not to decrease total efficiency in the supply of electric power and thus raise overall prices to consumers by permitting a current license holder to be forced to relinquish hydro facilities to another entity, not because of the quality of service, but simply because the challenging entity happens to be a municipality.

I respectfully urge your support for S. 426 which allows for the best interest of all concerned to be the deciding factor in the reissuance of a license to operate a hydro facility.

This is an important issue for the people of the Piedmont Carolinas, one that will affect the economic growth of our area. Your careful study and consideration is appreciated.

Thank you very much for allowing me to express these views.

STATEMENT
OF
NATIONAL WATER RESOURCES ASSOCIATION
BEFORE THE
SUBCOMMITTEE ON WATER AND POWER
OF THE
COMMITTEE ON ENERGY AND NATURAL RESOURCES

PRESENTED BY

THOMAS F. DONNELLEY
EXECUTIVE VICE PRESIDENT

JUNE 11, 1985

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE,

THE NATIONAL WATER RESOURCES ASSOCIATION STRONGLY URGES YOUR SUPPORT OF S. 426 BY SENATOR WALLOP, A MEASURE WHICH WOULD MODIFY THE MUNICIPAL PREFERENCE CLAUSE OF THE FEDERAL POWER ACT BY ELIMINATING MUNICIPAL UTILITY CLAIMS FOR A "PREFERENCE" IN RELICENSING OF HYDROELECTRIC POWER PROJECTS AND ESTABLISHING JUST COMPENSATION AS THE PRICE FOR ANY RELICENSING TAKEOVERS.

THE NATIONAL WATER RESOURCES ASSOCIATION IS A NON-PROFIT FEDERATION OF ASSOCIATIONS AND INDIVIDUALS PRIMARILY CONCERNED WITH THE OPTIMUM DEVELOPMENT AND USE OF WATER AND LAND RESOURCES. WE ARE A FEDERATION OF ASSOCIATIONS WHICH INCLUDE IN THEIR

MEMBERSHIP MANY GOVERNMENTAL OR QUASI-GOVERNMENTAL UNITS, INCLUDING CITIES, COUNTIES, IRRIGATION DISTRICTS, CONSERVANCY DISTRICTS AND OTHER WATER MANAGEMENT ENTITIES.

THE STATE ASSOCIATIONS REPRESENT NOT ONLY THE RECLAMATION STATES AND HAWAII, BUT ALSO INDIVIDUAL MEMBERS FROM OTHER STATES WHO HAVE ELECTED TO IDENTIFY WITH THE PURPOSES AND PROGRAMS OF THE NATIONAL WATER RESOURCES ASSOCIATION.

AT THE FIFTY-THIRD ANNUAL MEETING OF THE NATIONAL WATER RESOURCES ASSOCIATION HELD NOVEMBER 11-14, 1984 IN PHOENIX, ARIZONA, THE DELEGATES IN CONVENTION ASSEMBLED ADOPTED RESOLUTION 84-14 WHICH INCLUDED IN PART THE FOLLOWING: "THAT THE CONGRESS AMEND THE FEDERAL POWER ACT BY MODIFYING THE MUNICIPAL PREFERENCE CLAUSE TO PROVIDE THAT ANY EXISTING LICENSEE SHALL RECEIVE A NEW LICENSE FOR ITS HYDROELECTRIC PROJECT UNLESS IT IS SHOWN THAT THE RELICENSING OF THE PROJECT WOULD NOT SERVE THE PUBLIC INTEREST AS WELL THE NEW APPLICANT."

THE ASSOCIATION'S POLICY ON THIS MATTER CAN BEST BE DESCRIBED AS STATED IN ITS POSITION STATEMENT ON HYDROELECTRIC RELICENSING AS FOLLOWS: "THE OPERATORS OF EXISTING HYDROELECTRIC PROJECTS LICENSED UNDER THE FEDERAL POWER ACT HAVE UTILIZED AND DEVELOPED THE NATION'S NATURAL RESOURCES IN THE PUBLIC INTEREST IN ORDER TO GENERATE LOW COST ELECTRICITY FOR MILLIONS OF AMERICANS. SUBSTANTIAL NUMBERS OF WATER USERS SERVED BY AGENCIES REPRESENTED BY THE NATIONAL WATER RESOURCES ASSOCIATION RELY ON THAT ELECTRICITY TO PROVIDE VITAL WATER SUPPLIES WHICH REQUIRE ELECTRICAL ENERGY TO EXTRACT GROUNDWATER, PURIFY DRINKING WATER, TRANSPORT WATER TO CONSUMERS, AND MAINTAIN WASTEWATER TREATMENT FACILITIES.

HOWEVER, CERTAIN HYDROELECTRIC PROJECTS ARE SUBJECT TO RELICENSING BY THE FEDERAL ENERGY REGULATORY COMMISSION. SINCE THE FEDERAL POWER ACT INCLUDES MUNICIPAL PREFERENCE PROVISIONS, SOME MUNICIPAL UTILITIES ARE ENDEAVORING TO SECURE THE OWNERSHIP AND OPERATION OF EXISTING PRIVATELY OWNED HYDROELECTRIC PROJECTS. THAT WOULD RESULT IN THE TRANSFER OF THE BENEFITS PROVIDED BY THOSE EXISTING PROJECTS TO A SMALLER SERVICE AREA AND WOULD THUS DIVERT LOW COST POWER AWAY FROM MANY AGENCIES AND WATER USERS REPRESENTED BY THE NWRA. THAT TRANSFER WOULD, ACCORDINGLY, RESULT IN INCREASED POWER COSTS TO WATER SUPPLIERS AND THEIR CUSTOMERS CURRENTLY RECEIVING THE BENEFIT OF THOSE EXISTING HYDROELECTRIC PROJECTS.

MANY HYDROPOWER LICENSES ARE EXPIRING AND THE RELICENSING OF THESE PROJECTS IS UNDER THE JURISDICTION OF THE FEDERAL ENERGY REGULATORY COMMISSION. NOTWITHSTANDING THE MUNICIPAL PREFERENCE PROVISIONS IN THE FEDERAL POWER ACT, SUCH PREFERENCE IS NOT IN ALL INSTANCES IN THE PUBLIC INTEREST. IN SOME INSTANCES, THE MUNICIPAL PREFERENCE APPLICANT HAS REFUSED TO HONOR PREFERENCE CONTRACTS OF IRRIGATION DISTRICTS WITH THE EXISTING LICENSEE, EVEN THOUGH SUCH CONTRACTS ARE ESSENTIAL FOR THE CONTINUED DELIVERY OF LOW COST WATER FOR IRRIGATION. IT IS THEREFORE URGED THAT CONGRESS AMEND THE FEDERAL POWER ACT BY MODIFYING THE MUNICIPAL PREFERENCE CLAUSE TO PROVIDE THAT SUCH PREFERENCE WILL NOT BE IMPOSED AGAINST AN EXISTING LICENSEE UNLESS IT IS SHOWN THAT THE RELICENSING OF THE PROJECT WOULD NOT BE IN THE PUBLIC INTEREST."

WE APPRECIATE THE OPPORTUNITY TO PRESENT OUR VIEWS ON THIS LEGISLATION TO THE COMMITTEE.

STATEMENT OF THE AMERICAN FARM BUREAU FEDERATION TO THE SUBCOMMITTEE ON WATER AND POWER OF THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES REGARDING S. 426, THE RELICENSING OF HYDROELECTRIC FACILITIES

Presented by
Dennis Stolte, Assistant Director, National Affairs Division

June 11, 1985

The American Farm Bureau Federation is a general farm organization organized in 48 states and Puerto Rico. Farm Bureau membership exceeds 3.2 million member families. The relicensing of hydroelectric facilities is of importance to our members, especially in the western states where farmers and ranchers share in the benefits of low-cost hydroelectric power which is distributed to them by privately-owned utilities. Farm Bureau supports S. 426, a bill dealing with the relicensing of hydroelectric plants.

In January, 1985, delegates to our 66th annual meeting adopted the following policy statement regarding the relicensing of hydroelectric facilities:

> "We favor federal relicensing of hydroelectric generation facilities in a manner which will protect agriculture's interest in maintaining the availability of lowest cost energy. The entity which constructed and operated the generation facility during the original license period should be given a preference for the license extension. Only in this manner can the most encouragement be given for risk ventures for the construction of future hydroelectric facilities."

The Federal Power Act gives states and municipalities preference over other applicants in the initial licensing of hydroelectric plants. It was generally agreed when the Act was written that the municipal preference would not apply at the relicensing stage, as some municipal utilities now claim.

We are very concerned by the recent moves made by municipally-owned utilities to take over privately-owned hydroelectric projects when they come up for relicensing. These actions could rob rural and agricultural users of the low-cost benefits of hydroelectric power. Attempted take-overs by municipalities of eleven privately-owned hydroelectric projects in the western states are now under way. Virtually no agricultural customers are served by these municipalities. On the other hand, virtually all of the private companies which are in danger of losing their contracts to municipalities are major suppliers of electricity to rural customers.

These take-overs would benefit a few people at the expense of many. More than 8 million customers are being served by the private utilities slated for take-over, while only 835,000 customers are being served by the municipalities which are competing for the facilities. If the take-overs are successful, more than $170 million annually in additional fuel costs will be passed to farmers and other customers of the investor-owned utilities because of the loss of low-cost hydroelectric power. Fresno County, California, users alone will be forced to pay an additional $2 million in fuel costs per year. Farmers and rural customers could be forced to pay the even more astronomical cost associated with the construction of new power generation plants which use alternative energy sources.

Municipalities now receive the greatest benefit from hydroelectric power as a result of the preference given to them during the initial licensing stage. About 75 percent of the nation's existing hydropower is used by customers served by state, federal and municipal projects. Farmers and ranchers and other customers of investor-owned utilities receive only about 25 percent of our nation's hydropower. If the preference for municipalities is extended to the relicensing stage, municipalities' share of the hydropower market will become even more disproportionate.

S. 426 would not guarantee that an existing licensee would retain its license indefintely. S. 426 requires that a licensee meet the standards set forth in Section 10(a) of the current law. Under Section 10(a), the Federal Energy Regulatory Commission (FERC) has the authority to refuse to issue a new license if criteria for serving the public interests are not met.

Mr. Chairman and members of the Subcommittee, we believe that it is time for Congress to speak on this issue. Recent rulings by the FERC have only confused the issues in hydroelectric relicensing. In 1980, FERC said that a preference for states and municipalities existed at the relicensing stage, but in 1983 FERC said there was no preference.

S. 426 clarifies hydroelectric facility licensing procedures by establishing that the preference for municipalities exists only in the initial licensing stage. We believe S. 426 provides an equitable procedure for hydroelectric relicensing that does not discriminate against customers merely because they are not served by city-owned facilities.

We urge your favorable consideration of S. 426.

Mr. Chairman and members of the Committee:

My name is Robert Georgine, President of the Building and Construction Trades Department of the AFL-CIO. I sincerely appreciate the opportunity to appear before you today to present our views on the process of hydroelectric relicensing.

Because the relicensing of hydroelectric power plants is a major consumer/labor issue, the Building and Construction Trades Department of the AFL-CIO supports H.R. 44, H.R. 1959, and S. 426 while opposing H.R. 1815 and S. 1219.

The reasoning is basic and fundamental to the Labor Movement.

Billions of dollars in the rates consumers must pay for electric power are at risk.

The adequacy of service to the consumer is at risk.

An analysis of electric bills summarizes the subject of hydroelectric relicensing, thusly:

Every electric consumer in America knows firsthand that energy bills have climbed sharply in recent years;

Most of these increases were forced, by soaring fuel costs associated with oil embargoes, resource scarcities, and other negative factors relative to the realities of global economics.

Recently, the world's energy picture has changed.

The so-called oil glut, development of new sources of supply and conservation, as well as the development of new and alternative energy sources, have acted to slow the upward cost spiral.

As a result, a stabilization of energy prices, especially for electricity, has taken place.

However, there exists a force in the American economy that threatens to allow energy prices to resume that destructive upward spiral, to the detriment of the majority of electric consumers.

The threat is against the only truly in-place source of free-fuel, low-cost, electric power -- the hydroelectric systems developed on the nation's waterways and rivers since the turn of the century by investor-owned utility companies.

Today, such free-fuel hydro projects serve millions of people in 41 states across the country.

As fuel costs have skyrocketed, free-fuel hydro-generated electricity has become a critically important factor in holding down energy costs to millions of customers.

However, because of a quirk in the 63 year-old federal statute that governs the licensing of hydroelectric projects, a few local officials are moving to take over investor-owned utility projects throughout this country as they come up for relicensing before the Federal Energy Regulatory Commission (FERC).

Either the Congress is going to protect the vast majority of consumers or it is going to legitimatize the uncalled for efforts of a few municipalities to pirate the low-cost hydro power presently serving most of the electric users in this nation.

Together, the competing entities with municipally-owned power systems have only a relative handful of customers; some have no costumers at all but want to get into the electric business at the expense of millions of American consumers.

The AFL-CIO's Building and Construction Trades Department vigorously supports the position of the great majority of consumer, labor, environmental, agricultural, business and government groups calling for assurances that the existing customers of hydroelectric facilities will continue to benefit from these plants in the relicensing process.

H.R. 44, H.R. 1959, and S. 426 are good, uncomplicated bills designed to serve the public interest in a fair and equitable manner. H.R. 1815 and S. 1219 would serve the cause of the municipalities intent on gaining control of these hydroelectric facilities for their own selfish motives. The so-called anti-trust and transmission provisions contained in these two bills frankly have no place in a relicensing bill and are obviously designed to confuse a clear problem.

Sometimes it is helpful to remind ourselves that the public is made up of people. City, county, and district municipalities are not the people. They are the instruments of the public.

What is really before the Congress is the single matter of clarifying an ambiguity in the Federal Power Act.

This can be done by providing unequivocably that an existing licensee of an existing hydro facility, who has met the conditions of his original license, will be granted relicensing if his new application is equal to or better than that of any competing applicant.

We urge your support of that precept. H.R. 44, H.R. 1959, and S. 426 were designed to do just that.

ALUMINUM COMPANY OF AMERICA
ALCOA BUILDING
PITTSBURGH, PENNSYLVANIA 15219
(412) 553-3648

ALCOA

VINCENT R. SCORSONE
Group Vice President Primary Metals

1985 June 12

The Honorable J. Bennett Johnston
Ranking Minority Member
Committee on Energy and Commerce
United States Senate
358 Dirksen Senate Office Building
Washington, DC 20510

Dear Senator Johnston:

Recently, Bill Conway, of your staff, contacted Russ Wisor in Alcoa's Washington office to follow up on our exchange of letters on pending hydroelectric relicensing legislation. Bill asked for more specific information on what effect the loss of our licenses would have on our company if they expired in 1986 instead of further in the future.

To answer this, let me begin by saying that Alcoa is virtually the only aluminum company operating a primary smelting plant in the entire service area of the Tennessee Valley Authority (TVA). Today in the TVA service area, over 70 percent of total aluminum capacity is shut down because of high electricity costs. Conalco is the only other smelter operating but at a token 13% of rated capacity. Alcoa can continue to operate its Alcoa, Tennessee, smelter only because of the power it generates at its own hydroelectric facilities. If we lost this power, we would close our smelting facility. In fact, I can state without qualification that if we lost both our hydroelectric projects (Yadkin and Tapoco), we would close our smelter in Badin, North Carolina, as well as the one in Alcoa, Tennessee. Closure of these two smelters would eliminate most of the remaining primary aluminum capacity in the southeastern U.S. In Tennessee, it would mean the loss of at least 800 jobs and associated financial benefits. In North Carolina, the loss would be over 650 jobs and their respective contribution to the local, state and national economy.

I trust this answers your question on the potential impact of this legislation. Needless to say, we appreciate your interest and leadership on this issue; and if you or Bill have any further questions, do not hesitate to contact Russ or me.

Sincerely,

V. R. Scorsone

VRS:rss

AABE

American
Association of
Blacks in
Energy

1730 Rhode Island Avenue, N.W.
Suite 814

Washington, DC 20036
(202) 835-0890

June 11, 1985

Honorable Frank H. Murkowski
Chairman
Water and Power Subcommittee
Senate Committee on Energy and Natural Resources
United States Senate

Dear Senator Murkowski:

Attached is the American Association of Blacks in Energy's testimony in favor of the passage of S. 426, the Electric Consumer's Protection Act of 1985.

We will appreciate your cooperation in including the enclosed testimony as a part of the record of the hearing on this important legislation.

Sincerely,

Robert E. Bates, Jr.

Robert E. Bates, Jr.
Chairman

Encl.

Officers
Robert E. Bates, Jr. *Chairman*
Charlie A. Thurston *First Vice-Chairman*
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Mary L. Boyd-Foy *Secretary*
Walter S. Stevens *Assistant Secretary*

Testimony in Support of S. 426 by the American Association of Blacks in Energy

My name is Robert E. Bates, Jr., I am Chairman of the American Association of Blacks in Energy, an organization of more than 300 members who work in the nation's utilities and oil companies.

The American Association of Blacks in Energy (AABE) is a non-profit advocacy association founded in 1977. AABE promotes national energy policies concerning energy use and research, the ownership of energy resources and the development of energy technologies. AABE members insist that officials of public and private institutions should consider the social, economic and political effects of national energy policy on those citizens who must bear the weight of energy policies but who do not adequately participate in the development of such policies. AABE has active local chapters throughout the United States whose members represent professionals in all phases of the energy industry. As Chairman of AABE, I am pleased to offer the following testimony for the hearing record compiled by the Senate Energy and Natural Resources Subcommittee on Water and Power.

During the next eight years, 177 hydroelectric generating facilities will be reviewed for relicensing. The future ownership of projects built and operated by regulated utilities throughout the United States will be determined by those relicensing procedures.

We at AABE promote the provisions of S. 426 that eliminate the preference for government-owned utilities at the time of hydro relicensing.

More than 74 percent of Black Americans, and more than 87 percent of persons of Spanish origin live within the metropolitan areas served primarily by regulated utilities. Application of preference at relicensing could mean higher electric bills for these, as well as other customers of the regulated utilities who have paid for the costs associated with construction, operation and maintenance of the hydro projects.

Investor-owned utilities generate approximately 76 percent of the nation's electricity, serving over 72 million residential customers and their families--a total of more than 175 million people. Hydroelectric generation is an important part of their energy mix, for it is clean, renewable energy with no associated fuel costs.

Investor-owned utilities were granted licenses to build and operate hydroelectric facilities by the Federal Energy Regulatory Commission and its predecessor, the Federal Power Commission, under the public interest standards of the Federal Power Act. A number of these licenses are now expiring.

In initial licensing, the process of granting the license includes a "preference" for state and municipal utilities over investor-owned utilities if, according to the Federal Energy Regulatory Commission, the plans of both are equally well adapted to serve the public interest.

The Federal Energy Regulatory Commission has issued two rulings about preference for state and municipal utilities over investor-owned utilities that are directly contradictory. FERC initially granted preference to government operators and subsequently reversed that ruling. Municipal agencies are awaiting the results of an appeal.

A public-power preference applied at relicensing would concentrate the benefits of hydro power among the relatively few customers of government-owned utilities, rather than spreading these benefits among the much larger number of consumers served by regulated utilities.

The only basis that would justify transfer of a license at the time of relicensing would be that a competitor's plan was better adapted to developing the resource in the public interest than was that of the existing licensee. Additionally, such transfer must, in fairness, be accompanied by just compensation of the original utility.

The American Association of Blacks in Energy urges the passage of legislation that will clarify the intent of the Federal Power Act, establishing that government-owned utilities do not have preferential status at the time of relicensing.

S. 426, the Electric Consumers' Protection Act of 1985, will provide that clarification and will ensure just compensation in the event a project is lost.

The American Association of Blacks in Energy asks that S. 426 be passed this year.

Thank you for the opportunity to submit this testimony.

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June 12, 1985

The Honorable Frank Murkowski
Chairman
Subcommittee on Water and Power
Committee on Energy and
  Natural Resources
United States Senate
Washington, D.C. 20510

Dear Senator Murkowski:

Enclosed is the prepared statement of Roger A. Fontes, Manager, System Planning and Engineering, Northern California Power Agency, Roseville, California, submitted in conjunction with your Subcommittee's June 11, 1985 hearing on hydroelectric relicensing. Mr. Fontes respectfully requests that his statement be made a part of the hearing record.

Thank you for agreeing to make this statement part of the hearing record.

With warm wishes.

Sincerely,

William J. Baer

William J. Baer

cc: Russ Brown
    Roger A. Fontes

BEFORE THE SUBCOMMITTEE ON WATER AND POWER
OF THE COMMITTEE ON ENERGY AND NATURAL RESOURCES
OF THE UNITED STATES SENATE

PREPARED STATEMENT OF
ROGER A. FONTES
MANAGER, SYSTEM PLANNING AND ENGINEERING
NORTHERN CALIFORNIA POWER AGENCY
ROSEVILLE, CALIFORNIA

JUNE 11, 1985

My name is Roger A. Fontes, Manager, System Planning and Engineering for the Northern California Power Agency (NCPA), a California joint-action agency whose members participating in two pending relicensing proceedings include the cities of Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Roseville, and the Plumas-Sierra Rural Electric Cooperative.

NCPA is here today because its members have a direct stake in the hydro relicensing debate. Our members have invested substantial time and over one-million dollars while competing, with other public entities, for two expiring licenses currently held by a privately owned utility. NCPA and its members believe strongly that the existing competitive hydro relicensing process furthers the public interest and should be preserved.

The Role of Competition

The basic premise of NCPA's position is that a fair, well-structured competitive relicensing process maximizes the public benefit and use of the public water resource from these existing licensed facilities.

In addition, to promote better future uses of the public resource, the competitive system also disciplines a licenseholder to be a better steward of the resource during the license period because of the threat that a facility license could be transferred.

Third, a competitive licensing process can produce these benefits even though there is actual competition for relatively few licenses and even fewer licenses ever change hands. It is the threat of the loss of the license that serves to discipline behavior, as existing licenseholders in a competitive system will be forced to "measure" their proposed use of the resource, in their relicensing application, in hopes of discouraging competing applicants.

This is where the private utilities have done the greatest disservice to the public and to the Congress in connection with this debate. They have intentionally created the impression that, under current law, hundreds of hydro facilities, representing a substantial portion of private utility generating capacity, will require to be turned over to the public utilities, thereby saddling the ratepayers of private utilities with massive rate increases.

Nothing could be further from the truth. The record to date bears this out. Since 1978, 126 relicensing cases have come before the Federal Energy Regulatory Commission (FERC). Only 10, or less than 8 percent, are even subject to challenge. To date, not a single license has changed hands.

This should not be a surprise to anyone. The costs alone of mounting a challenge to an existing applicant even under existing law are a substantial deterent to potential challenges and serves to discourage frivolous applications. This, in short, is why the competitive process serves the public interest without causing massive disruption to the operation of hydro facilities.

While the present system promotes competition, two bills pending before this Subcommittee, S. 426 and S. 403, would preclude it. S. 426, by Mr. Wallop, subverts competition in two major ways. First, it provides for a one-sided inquiry into the bona fides of the existing licensee and excludes any other applicants from consideration. Under the Wallop Bill, only if the Commission determines that tne existing licensee's application does not meet the Commission's standards, may the Regulatory Commission consider other applications. And, thus, a competing applicant -- even one with a superior plan -- would not be considered by the Commission if the existing licensee's application meets the prescribed standards of the Commission, or even if the license could be amended to meet those standards.

The second objectionable aspect of the Wallop Bill is the compensation provision -- replacing the current net investment plus severance damages standard with a "just compensation" standard. There is no equitable or legal basis for their position. Current law compensates existing private licensees for every penny they spent on the existing hydroelection facility. Current law has also allowed existing licensee's to make generous profits for over 30 to 50 years through the rent-free use of a valuable public water resource.

The comments of PG&E Chairman Frederick W. Mielke, Jr., demonstrate the disingenuous nature of the private utilities' position. On the one hand, in defending the "just compensation" provision, Mielke explained at this Subcommittee's hearing on May 17, 1984, that just compensation is necessary "to enable PG&E to construct a facility that would produce the same quality and quantity of electricity at the same operating cost across the same lifetime". Hearings at 132. On the other hand, Mielke recently made clear that PG&E has a substantial power surplus and, therefore, has no need to replace any hydro facilities it may loose.

> "When Diablo Canyon goes into full operation, says Mielke, another problem is likely to develop -- finding markets for what will then be an oversupply of electric power". Electrical World, (January, 1985).

My basic point is that S. 426 establishes a compensation standard which provides the existing licenseholder with a capital-gain windfall -- much more than it paid for the facility, and much more than it will need to replace any power lost as a result of the license transfer. At the same time, a replacement-value requirement would pose an insurmountable financial deterent to any potential competing applicant for an existing license.

In short, the Wallop Bill quite effectively destroys the existing competitive process in two ways: first, by creating a sole source bidding procedure to discourage other applicants; and, secondly, by establishing a windfall compensation scheme that overcomes any economic incentive for the public utility to compete.

S. 403, by Senator Johnston, although it does not change the compensation to be paid when a license changes hands, also will cripple the competitive process. Senator Johnston's Bill slants "the level playing field" so far in the existing licensee's favor that, no one, including NCPA's members, will have any incentive to spend the time and money to compete. S. 403 does this by eliminating the existing public preference in relicensing proceedings and substituting a clear preference for the existing licenseholder. The Bill also imposes an economic test on the FERC which is unfair and that will make it very hard for any publicly owned utility to demonstrate that it has "a better plan".

There is simply no justification for tilting the playing field in favor of the existing licenseholder. It already has the inherent advantage of incumbency in the relicensing process. It knows the project, and it is much better positioned to prepare a knowledgeable application. Any competing public, on the other hand, needs to undertake new and expensive engineering and environmental studies without first-hand knowledge of the facility or the surrounding area. In addition, the public applicant is at the mercy of the existing licenseholder for access to the project to undertake those studies.

What's more, isn't it profoundly unfair to conclude that the party who has freely benefited for 50 years from the project, is always the party that will be preferred for the project in the future? Such a policy would simply ensure that the rich and large get richer, while the poor and small get poorer.

We are also concerned about the economic standards in the Johnston Bill, for we fear that they invite the FERC to employ a simple numbers test -- that is to conclude that the large private utilities who already hold these licenses will be able to keep them all simply because they have more customers. Under this obviously unfair theory, public (small) utilities will never obtain access to any hydro projects, if a larger private utility wishes to mount a challenge.

The Benefits of S. 1219

S. 1219, by Senator Metzenbaum, stands in stark contrast to the other two bills before this Subcommittee. It preserves the current competitive process and improves upon it to make it even fairer. First, it eliminates the public utilities' final right to amend in relicensing proceedings. By eliminating this provision of current law, it precludes the possibility that public utilities can regularly invoke public preference by automatically creating "a tie". It also makes the relicensing process more truly competitive by requiring all parties to submit final amendments simultaneously, thereby denying one side the benefit of an advance look at the other's proposal. We believe this compromise of current legislation will truly accomplish the "level playing field" so important to the public relicensing process.

Second, S. 1219 increases the compensation to the existing licensee if the license is awarded to someone else. The Bill does this by enabling the existing licenseholder to reduce gradually its reliance on power generated by the project and avoid any sudden effect on its customers. It does this by requiring the new licenses to make available up to 25 percent of the output of the project to the existing licensee for the initial one-fifth of the license term.

Third, Senator Metzenbaum's Bill encourages competition between applicants and requires full consideration by the Commission of environmental, recreation, and energy conservation concerns in the relicensing process.

Fourth, it authorizes the Commission to require a licensee to provide transmission or "wheeling of power" on a fair and reasonable basis. By attaching this condition of responsible utility behavior to anyone who receives this free valuable public benefit, S. 1219 assures that no private or public utility can arbitrarily deny other utilities reasonable access to other sources of power.

These last two provisions, the antitrust review and wheeling provisions, are especially important to the NCPA members who have long suffered at the hands of private utilities. For example, PG&E has refused to deliver firm Bonneville power from Washington State into NCPA in northern California. Similarly, it has refused to honor an agreement between the federal Western Area Power Administration (WAPA) and NCPA, under which NCPA is entitled to purchase surplus WAPA power imported from the Pacific Northwest.

Moreover, even though it had excess transmission capacity and would have been fully compensated for its use, PG&E refused for many months to transmit the output of NCPA's recently built 110,000 KW geothermal plant. PG&E also effectively delayed for more than two years, the construction of NCPA's 200,000 Calaveras hydroelectric power project, on the North Fork of the Stanislaus River, by unsuccessfully arguing to the FERC and to the Appeals Court, that the FERC could not order PG&E to settle a minor dispute holding up NCPA's license and project construction.

This is the irony confronting the Subcommittee today and which makes life difficult for NCPA members. The big, powerful private utilities, such as PG&E, deal arbitrarily and unfairly with our members and threaten their very existence. Yet, at the same time, they are asking you to grant them perpetual rights to use the public's valuable hydro power and, in so doing, to exclude us from any opportunity of any portion of this valuable resource.

This is why it is essential that the Metzenbaum provisions, which require wheeling as a condition of any hydro license and mandate thorough antitrust review in conjunction with the regulatory licensing process, are so important.

Thank you for the opportunity to appear on behalf of NCPA and its members; Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Roseville, and the Plumas-Sierra Rural Electric Cooperative.

Central Maine Power Company
Edison Drive, Augusta, Maine 04336
(207) 623-352

John W. Rowe
President and Chief Executive Officer

June 24, 1985

The Honorable Frank H. Murkowski, M.C.
Chairman, Water and Power Subcommittee
Senate Committee on Energy and Natural Resources
360 Dirksen Senate Office Building
Washington, D. C. 20510

Dear Chairman Murkowski:

Enclosed, for the record, is a late-filed statement for consideration by your committee in the review and decision-making process on S.426, The Electric Consumers Protection Act of 1985.

We regret the delay in filing our position statement on this important issue, but hope it will not be too late for consideration by your committee when addressing the merits of this legislation.

Very truly yours,

John W Rowe

John W. Rowe
President and
Chief Executive Officer

Enclosure

CMP
An electric company in Maine
dependent upon earning the trust of its investors, employees, customers and their government representatives

Statement by John W. Rowe
President and Chief Executive Officer
Central Maine Power Company
to the Senate Committee on Energy & Natural Resources
Subcommittee on Water and Power
Washington, D. C.
June 11, 1985

Chairman Murkowski, Members of the Committee:

My name is John W. Rowe. I am President and Chief Executive Officer of the Central Maine Power Company. Prior to joining Central Maine Power I was Senior Vice President - Law for Consolidated Rail Corporation, a railroad owned by the United States Government, and earlier had been with the law firm of Isham, Lincoln and Beale, Chicago, where I worked on regulatory and licensing matters for the Commonwealth Edison Company.

My company appreciates the opportunity to have its view recorded in support of S.426, "The Electric Consumer Protection Act of 1985," sponsored by Senator Wallop and 24 other cosponsors. This legislation also has been endorsed by the National Association of Regulatory Commissioners (NARUC), the National Conference of State Legislatures, the National Association of Counties, the American Association of Retired Persons (AARP), such business associations as the U. S. Chamber of Commerce, the National Association of Manufacturers, the American Petroleum Institute, the American Paper Institute, the New England Council, the American Farm Bureau Federation, by various labor unions, civic groups and civic leaders.

Central Maine Power, with general offices in Augusta, Maine, is Maine's largest investor-owned electric company. Serving Maine people since 1899, the company today has over 415,000 customers in 332 communities with a population of over 800,000 people, and three smaller investor-owned electric companies in Maine serve an additional 110,000 customers. In contrast, only approximately 12,500 customers are served by five municipal power companies, and only approximately 12,400 by four electric cooperatives. Expressed another way, 96% of Maine's electric customers are served by investor-owned companies and only 4% by municipals or REAs.

Central Maine Power Company is a member of the New England Power Pool and further enhances its power supply and reliability of operations through an interconnection with Canada. Our total net capability of over 1.5 million kilowatts is made up of an enviable generating mix of oil-fired, nuclear and hydro-electric plants supplemented by purchases from cogenerators and from Canada. In 1984 percentage of kilowatt hours provided by that mix was:

oil	26%
nuclear	28%
hydro	18%
cogeneration	11%
Canadian	17%

About one-fifth of the Company's capacity is in 23 hydro-electric stations which in a normal year also produce about one-fifth of total kilowatt-hours sold. This hydroelectric power, combined with the large percentage of low cost nuclear power, enables the 800,000 people we serve to enjoy the lowest electric rates of the major companies in New England, and lower than many other sections of the country.

Two-thirds of Maine's hydro capacity is up for relicensing by 1993, and CMP will file to relicense 18 projects within the next five years. We are among the top ten companies with more than 100,000 kilowatts of hydro capacity subject to relicensing.

We have in recent years relicensed and rebuilt three of our hydro stations to greatly increase their capacity and total kilowatt-hour output. Our Shawmut station in the town of Fairfield on the Kennebec River, for example, was reconstructed in 1981 and 1982 to increase the capacity from 4650 kilowatts to 8740 kilowatts. On the Androscoggin River, our Brunswick-Topsham station was rebuilt between 1979 and 1983 so that an eleven-fold increase in low-cost energy was obtained, from 8 million kilowatt-hours to 90 million kilowatt-hours. Capacity was increased from 2,300 kilowatts to 19,000 kilowatts. As one example of the Company's stewardship of a valuable natural resource, a $2 million fishway was installed as part of the reconstruction. Most recently we rebuilt our Hiram Station on the Saco River to increase capacity from 2,800 to 11,500 kilowatts. The project was completed three months ahead of schedule and $1.5 million under budget.

Consumer Impacts

Utility hydroelectric projects in Maine generate nearly 1.5 billion kilowatt-hours a year at a cost of less than one cent each. If these same kilowatt-hours were generated by our oil-fueled plants, or even if they were replaced by lower cost Canadian energy, the additional fuel cost alone to our customers today would be about $80 million a year.

If Maine utilities were forced to give up these projects the cost of replacement power for our customers would be nearly five to ten times higher. This could occur under several different scenarios:

(1) In order to replace the energy lost from a low-cost hydro plant, we would either have to generate more power from our other higher-cost generation facilities (for the most part oil-fueled), or purchase replacement power from other utilities.

(2) In some instances a company might be forced to build a new plant to replace the lost generating capacity. In dollars and cents, this translates to replacing

electrical capacity which cost $200-300 per kilowatt of capacity in the 1920's and 1930's for new capacity of more than $2,000 per kilowatt today. (On the other hand, the municipal taking over the facility could, in fact, enjoy the reverse side of the coin and would be able to purchase these facilities under the present law at their "net investment"--perhaps for a fraction of their replacement value. In this instance municipal preference would reduce rather than enhance the number of people who benefit from the energy.)

Whether the threat to these projects is real or only perceived, the fact remains that in 1980 the Federal Energy Regulatory Commission placed a new interpretation on the application of the preference clause and then reversed itself in 1983. A change in future FERC membership could result in change again. Customers deserve decisions that can be depended upon. Current uncertainty surrounding future ownership can only hamper our own planning and effective regional power planning for the long term.

New England's hydro plants, including CMP's, provide the regional power pool, NEPOOL, with the flexibility needed to respond to changing electrical demand for optimum efficiency, reliability and economy. Their loss would disrupt the careful coordination and integration of a regional power supply system which has served New England and Maine well.

An additional reason why consumers want to see the law on preference clarified is that these investor-owned facilities are a major generator of tax revenues. Our Wyman hydro station on the upper Kennebec River, for example, produces 93% of the total tax commitment of the town on the west bank of the river, and 75% of the taxes collected by the town on the east bank. The percentages for most major sites range from around 3% and up, and the loss of these tax revenues through a takeover by an outside public power group would be severe for most of our communities.

The impact of higher electricity costs on the low income and the elderly, on jobs and economic development is yet another reason consumers want uncertainty about hydro relicensing clarified. The problem of uncertainty is now just an investor-owned utility problem in Maine, where private paper companies and other industrial licenses could be at risk. Loss of these industrial generating facilities would effect operating costs and jeopardize continued operations in Maine in most instances.

With clarification of the preference issue as provided by S.426 uncertainty relating to planning for maintenance expenses will be removed, power supply planning will be enhanced, and the majority of customers will benefit in the long run.

We urge you to give prompt and favorable consideration to S.426.

SERVING
NEBRASKA

**THE CENTRAL NEBRASKA PUBLIC POWER
AND IRRIGATION DISTRICT**

See reverse for complete addresses and telephone numbers

P.O. Box 356, Holdrege, NE 68949

June 25, 1985

The Honorable Frank Murkowski
Subcommittee on Water and Power
Room 212, Hart Senate Office Building
2nd and C Streets, N.E.
Washington, DC 20510

Dear Chairman Murkowski:

The Central Nebraska Public Power and Irrigation District which owns hydroelectric facilities on the Platte River in Nebraska understands that your Committee is considering several bills which would amend the Federal Power Act. Our hydroelectric project was licensed pursuant to that Act, and we have recently applied to the Federal Energy Regulatory Commission for renewal of our license. This "relicensing" process has raised a technical question concerning coordination between the Power Act and environmental laws, and we believe it would be useful to resolve that question in any amendment to the Power Act.

For many years, the FERC and its predecessor the FPC have licensed and regulated hydroelectric projects in the public interest pursuant to the Power Act. This regulatory process has two distinct, interrelated features -- first, it accommodates a complex and diverse set of interests, including water use, power generation, environmental protection, recreation and development interests; second, the substantive integrity of these accommodations is firmly rooted in the procedural process used. In short, the Power Act licensing decisions by FERC are largely accepted as "fair" by the interested parties because the means employed to reach them are procedurally rigorous.

If nothing else, the parties are usually assured of the right to provide FERC with a clear vision of the real facts at hand. This is so because the facts in licensing proceedings are developed through administrative procedures which provide the parties the opportunity to test the bases for matters assorted through the presentation to Administrative Law Judges of sworn, cross-examined evidence. Given the substantial interests at stake, it should be no other way.

CENTRAL DISTRICT BOARD OF DIRECTORS FOUR COUNTY AREA

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[illegible]

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[illegible]

The technical coordination question arises in the following manner. As we understand it, the United States Fish and Wildlife Service designates certain plants, birds, fish and animals as "endangered". It also designates certain geographic areas as "critical" to these species, plants and animals and recommends, when appropriate, steps that should be taken by other federal agencies to maintain the area so designated in a suitable fashion. The Fish and Wildlife Service executes its responsibilities through administrative rulemakings and less formal actions which, by definition, do not require the same procedural safeguards that attend FERC licensing proceedings. Thus, when the Fish and Wildlife Service seeks to influence a FERC licensing proceeding because of some arguable impact that the FERC-licensed project may have on a designated "critical" area, there is some question as to whether the Service's designation of an area as "critical" is subject to the procedural safeguards routinely afforded in FERC proceedings. It is our understanding that any Fish and Wildlife determinations or recommendations would, if they were to be considered at all by FERC, have to be entered into evidence and be subject to procedural safeguards such as cross-examination. This seems only reasonable, but may not be wholly free from doubt.

Accordingly, we think the Power Act should be amended to clarify that the usual procedural safeguards in FERC licensing proceedings remain in full force and effect with respect to determinations made by other agencies where the FERC-type procedural safeguards have not been employed. We understand that so-called "rulemakings" may be useful and appropriate for generic issues or necessary where trial-type procedures would be administratively difficult. On the other hand, however, trial-type procedural safeguards are at the very foundation of FERC licensing proceedings and cannot be undercut without abusing the fundamental integrity of FERC decisions. Thus, we hope you will consider an amendment to resolve this ambiguity.

We thank you for your attention to this matter and ask that this letter be entered in the Committee's record of hearings on the legislation relating to amendments to the Federal Power Act.

Very truly yours,

Frank J. Dragoun
General Manager

cc: All Members of Subcommittee on Water and Power
The Honorable J. James Exon
The Honorable Edward Zorinsky

CITY OF MERCED

CITY HALL, 1730 M STREET, MERCED, CA 95340 · P.O. BOX 2068 (209) 722-4131

June 4, 1985

Honorable Frank Murkowski, Chairman
Members of the Senate Committee on
Energy and Natural Resources
Subcommittee on Water and Power
Senate Office Building
Washington, D. C. 20510

Gentlemen:

On April 1, 1985 the City Council of Merced, California passed a resolution in support of S426, a bill that would clarify the preference clause of the Federal Power Act and eliminate municipal utility claims to a "preference" in the relicensing of hydroelectric power projects, while establishing "just compensation" in the event of takeover.

Municipal preference at relicensing time would result in the diversion of low-cost power from millions of customers of regulated utilities to the benefit of a privilege few customers of municipal utilities who for the most part already have access to cheap federally subsidized power.

Confusion in interpretation of the Federal Power Act has led to conflicting decisions about application of preference on the part of the Federal Energy Regulatory Commission. The legislation now before your committee will resolve tne questions and benefit millions of consumers throughout the nation.

We respectfully ask that our position be put into the record of your proceedings.

Yours truly,

Samuel C. Pipes

SAMUEL C. PIPES
Mayor

cc: Sean T. Ryan, P.G.&E.

EQUAL OPPORTUNITY EMPLOYER

EDWARDS ASSOCIATES, Inc.
507 2nd STREET, N.E.
WASHINGTON, D.C. 20002
(202) 546-1516

Record

June 25, 1985

Dear Mr. Brown:

The enclosed letter from the Confederated Tribes of the Warm Springs Reservation of Oregon is submitted for inclusion in the hearing record on the FERC relicensing bills.

I trust that this submission is timely. If there are any difficulties or questions, please give me a call.

Sincerely,

Mark Phillips

Mark Phillips
Edwards Associates, Inc.,
for the Confederated Tribes
of Warm Springs

Warm Springs, Oregon 97761 / 503 553-1161

June 24, 1985

Hon. Frank Murkowski, Chairman
Subcommittee on Water and Power
Energy Natural Resources Committee
United States Senate
Washington, DC 20510

Re: Comments on Behalf of the Confederated Tribes of the Warm Springs Reservation of Oregon for Inclusion In the Record of the Subcommittee Hearings on June 11 on Hydro Relicensing Legislation -- S426, S403, S1219, S1260

Dear Chairman Murkowski:

The Confederated Tribes of the Warm Springs Reservation of Oregon is a federally recognized Indian tribe occupying a reservation of approximately 640,000 acres located in north central Oregon. The Deschutes River forms the eastern boundary of our reservation and is one of our most precious resources.

Located on the Deschutes River where it forms the reservation boundary is the Pelton Hydroelectric Project, FERC No. Oregon 2030, which consists of the Pelton Dam, the Round Butte Dam and the Reregulating Dam. Portland General Electric Company ("PGE"), an investor-owned utility, built the project and has operated Pelton and Round Butte. Pelton began commercial operation in 1958, and Round Butte began commercial operation in 1964. In 1982, the tribes completed a hydroelectric project of our own located at the reregulating dam.

Because these projects utilize tribal lands, waters and other resources, tribal permission to construct the project was required. PGE and the tribes entered into an agreement in 1955, which was amended in 1961, to allow PGE to utilize these tribal resources.

Because of the special obligation which the United States owes to Indian tribes, commonly called the trust responsibility, the Federal Power Act contains special provisions for the protection of Indian tribes. Among the most significant of these is Section 10(e) of the act (16 USC § 803(e)), which provides for reasonable compensation to be paid to tribes for the use of their lands and periodic adjustment of that compensation.

At the time our people consented to the use of our lands in connection with these projects, it was our hope and expectation that at some future date the projects would belong to the tribe. This is still our hope, goal and expectation.

Your committee is considering a number of bills which affect the hydrolicensing process, including relicensing, preferences, and annual charges. We urge that you not lose sight of the special duty that the United States owes to Indian tribes and that whatever form of legislation is ultimately enacted preserve the rights and expectations of our tribe when we consented to the use of our lands for this project. No legislation should deny the tribes the opportunity to assume control of our own destiny and resources by becoming the licensee of a project on tribal lands.

There are very few major hydroelectric projects on tribal lands, so preserving tribal rights should not cause any disruption of the legislative scheme.

We appreciate the opportunity to submit these comments for the record. We intend to submit detailed comments on individual legislation as this matter continues under consideration by the Congress.

Thank you very much.

Sincerely,

Zane Jackson

ZANE JACKSON
Chairman, Tribal Council

ob

Fredericks & Pelcyger

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THOMAS R. ACEVEDO*
THOMAS W. FREDERICKS
ROBERT S. PELCYGER**
ROBERT S. THOMPSON III***
DALE T. WHITE

*ADMITTED ONLY IN VIRGINIA
**ADMITTED ONLY IN CALIFORNIA AND NEW YORK
***ADMITTED ONLY IN WISCONSIN

TOM W. ECHOHAWK
(1952 - 1982)

OF COUNSEL
ROBERT J. GOLTEN

Record

FEDERAL EXPRESS

June 23, 1985

The Honorable Frank H. Murkowski
Chairman of the Subcommittee on
Water and Power
Committee on Energy and Natural
Resources
United States Senate
212 Senate Hart Office Building
Washington, D.C. 20510

Re: S. 403 and S. 426 - Hydroelectric
Project Relicensing

Dear Senator Murkowski:

This letter is written on behalf of my clients, the La Jolla, Rincon, San Pasqual, Pauma and Pala Bands of Mission Indians (Bands), who respectfully request that their concerns be taken into account by the Subcommittee on Water Power in its consideration of S. 403 and S. 426 and any related legislation amending the relicensing provisions of the Federal Power Act of 1920. The Bands also request that this letter be included in the record of the hearings on S. 403 and S. 426.

The Bands' Reservations are located along the San Luis Rey River and its tributaries in northern San Diego County, California. Their interest in S. 403 and S. 426 arises from the license for Project No. 176, a project that produces less than one megawatt of hydroelectric power for which the Federal Power Commission issued a fifty-year license in 1924 to the Escondido Mutual Water Company of Escondido, California. (Since 1974 the Project has been operated pursuant to annual licenses.) Project No. 176 occupies lands within the La Jolla, Rincon, and San Pasqual Reservations and diverts the waters of the San Luis Rey River away from all five Reservations.

My clients have opposed the reissuance of a license for Project No. 176, contending, among other things, that a license without satisfactory terms and conditions would interfere and be inconsistent with the purposes for which their reservations were established. The Bands also filed a competing application for the license. Following lengthy hearings in 1973-1975 before the Commission in its first contested relicensing proceeding, the case eventually went to and was decided by the United States Supreme Court about a year ago. See Escondido Mutual Water Company v. La Jolla, Rincon, San Pasqual, Pauma and Pala Bands of Mission Indians, 104 S. Ct. 2105 (1984). The effect of the Supreme Court's decision was to reverse the Commission's 1979 relicensing determinations and to remand the case back to the Commission for further proceedings.

My clients are also involved in related water rights litigation involving the waters of the San Luis Rey River that have been diverted through the facilities licensed under Project No. 176. That case has been pending before the United States District Court for the Southern District of California since 1969 and presently is scheduled to go to trial in November 1985.

The Bands' interests, concerns, and position with regard to S. 403 and S. 426 are similar to those of the Confederated Salish and Kootenai Tribes of the Flathead Reservation, Montana as set forth in the May 23, 1985 letter to you from their attorney, Foster De Reitzes. Under present law, the Bands have an equal and fair opportunity to compete for the license for Project No. 176, which authorized the use of their lands for fifty years, under the terms of that license which incorporated the relicensing provisions of the 1920 Federal Power Act. By contrast, under S. 403 and S. 426, the position of original or existing licensees would be greatly strengthened. They would be granted what amounts to a conclusive preference. In effect, the 50 year lease of the Bands' lands authorized in the license for Project No. 176, which has now expired, would be converted retroactively into a perpetual easement. The terms and conditions of the original license, which were accepted by the Escondido Mutual Water Company and under which it has used and enjoyed the Bands' lands for the past sixty-one years, would be radically altered to the severe prejudice of the Bands and without their consent.

It would be grossly unfair to the Bands to change the rules of the game following the expiration of the original license. They should be able to compete for the license under the terms and conditions incorporated in the 1924 license which were accepted by the original licensee and which have been in efect during the course of the entire 50 year term of the license as well as during the Project No. 176 relicensing proceedings over the past fourteen years.

The Bands' situation is also similar to that of the Confederated Salish and Kootenai Tribes in that the controversy involving Project No. 176 appears to be on its way toward a negotiated settlement. On June 14, 1985, the Bands, the Escondido Mutual Water Company and the two other parties who are directly involved in both the relicensing proceedngs and the water rights litigation, the City of Escondido and the Vista Irrigation District, reached an agreement in principle for resolving their disputes. The terms of the agreement are set forth in the joint statement attached to this letter. The settlement is contingent on the enactment of legislation which is expected to be introduced during the current session of Congress by Representative Ron Packard of California.

The June 14, 1985 agreement in principle is the result of long and complex negotiations. Any changes in the relicensing provisions of the Federal Power Act prior to the enactment of the implementing legislation could undercut the settlement and cause it to become unraveled. Moreover, now that an agreement in principle has been reached, it would be extremely counter-productive for the parties involved in the Project No. 176 proceeding to become embroiled in the controversy surrounding S. 403 and S. 426 in an effort to gain an advantage in the relicensing proceedings if, for some reason, the settlement legislation is not enacted.

The Bands therefore urge the Subcommittee on Water and Power to include one or another of the following provisions in any bill amending the relicensing provisions of the Federal Power Act:

1. an exemption for Project No. 176;
2. a savings provision (such as Section 7 of H.R. 1815) which exempts any project for which an application for a new license or a competing application is pending as of the date of enactment; or
3. a savings provisions exempting previously licensed projects within Indian reservations as suggested by Mr. De Reitzes.[1/]

[1/] According to a 1972 report prepared by the Federal Power Commission for a Senate Subcommittee, at that time there were only eight licenses for hydroelectric projects located within Indian reservations. Hearings on Federal Protection of Indian Resources before the Subcommittee on Administrative Practice and

Footnote continued on next page.

The inclusion of one of these provisions is essential to avoid undermining the proposed settlement or otherwise infringing on the Bands' rights under existing law and the license which has governed the use of their lands for the past sixty-one years.

Sincerely yours,

Robert S. Pelcyger

cc: The Honorable Mark O. Hatfield
The Honorable Daniel J. Evans
The Honorable Don Nickels
The Honorable Lowell D. Weicker, Jr.
The Honorable Bill Bradley
The Honorable Wendell H. Ford
The Honorable Howard Metzenbaum
The Honorable Alan Cranston, Att'n: Hal Gross
The Honorable Pete Wilson, Att'n: Jim Burroughs
The Honorable Ron Packard
Clyde Romney, Esq.
Mr. Russell R. Brown
James D. Noteboom, Esq.
Mr. Franklin D. Ducheneaux
Ann Crichton, Esq.
Assistant Secretary, Indian Affairs
Donald R. Lincoln, Esq.
Kent H. Foster, Esq.
Mr. William Harrington
C. Emerson Duncan, III, Esq.
Charles E. O'Connell, Jr., Esq.
Gil Sperling, Esq.
Mr. Paul Alexander
Foster De Reitzes, Esq.

Footnote 1/ continued.

Procedure of the Senate Committee on the Judiciary, 92d Cong., 1st Sess. Pt. 7 at 1677-85 (1972). Of these eight projects, the two involving the Bands and the Confederated Salish and Kootenai Tribes appear to be on the road to settlement, one has never been built, one already has been relicensed pursuant to a negotiated settlement, and two utilize Indian lands only for relatively short transmission lines. Thus, the effect of an exemption for previously licensed projects within Indian reservations would be very limited. (The 1972 report also noted the existence of transmission line projects which utilize Indian lands, but those licenses were issued prior to the Commission's ruling that such projects are not subject to its jurisdiction. *See* *Pacific Power & Light v. FPC*, 184 F.2d 272 (D.C. Cir. 1950).)

JOINT STATEMENT OF PRINCIPLES FOR SETTLEMENT BY CITY OF ESCONDIDO/ESCONDIDO MUTUAL WATER CO., VISTA IRRIGATION DISTRICT, AND LA JOLLA, RINCON, SAN PASQUAL, PAUMA AND PALA BANDS OF MISSION INDIANS

On June 14, 1985, a meeting was held in San Diego, California, and attended by the following persons:

Name	**Representing**
Bob Pelcyger	La Jolla, Rincon, San Pasqual, Pauma and Pala Bands of Mission Indians
Tom Wilson	Vista Irrigation District
John Schell	Vista Irrigation District
Kent Foster	Vista Irrigation District
Paul Engstrand	City of Escondido/Escondido Mutual Water Co.
Don Lincoln	City of Escondido/Escondido Mutual Water Co.
Dave Chapman	City of Escondido/Escondido Mutual Water Co.

The above-named representatives agreed to certain principles for the settlement of the following pending litigation:

1. Rincon Band of Mission Indians, La Jolla Band of Mission Indians, v. Escondido Mutual Water Company, et al., Civil No. 69-217-S;
2. Rincon Band of Mission Indians, et al., v. Vista Irrigation District, Civil No. 72-276-S;
3. United States of America v. Escondido Mutual Water Company, et al., Civil No. 72-271-S, and
4. Relicensing Proceedings for Project 176 before the Federal Energy Regulatory Commission.

The principles are based upon the assumption that in addition to the local supplies developed by the Escondido/Vista system facilities on the San Luis Rey River (including Henshaw dam, the Warner Basin wells, the Escondido canal, and Bear Valley dam), there shall be made available to the Indian Bands twenty thousand acre feet of imported water.

First, the water developed locally shall be shared equally.

Second, the Indian Bands may use, exchange, or dispose of the imported supplies as they choose.

Third, the following operating principles shall apply:

1. Escondido and Vista shall guarantee that there is a minimum of 7000 acre feet of water annually available from the local supplies for the Indians.
2. Escondido and Vista shall take delivery of the water not needed by the Indians for use on their reservations and reimburse them at a rate per acre foot which is equal to ninety-five percent of their average annual cost for untreated water purchased from the San Diego County Water Authority for the first 7000 acre feet and eighty percent thereof for additional water.
3. Escondido and Vista shall be reimbursed for the actual costs incurred for energy in pumping wells in the Warner Basin for the Indians' share.

Fourth, Escondido and Vista shall be responsible for replacing, operating, and maintaining the physical facilities necessary for continued development of the local water resource in substantially the same manner as in the past, in return for which the Indian Bands will make available thirty percent of the imported water to Escondido and Vista, for which Escondido and Vista will pay the conveyance cost.

These principles are subject to approval by the respective authorities of the parties, solemnization in detailed formal written agreements, and enactment of appropriate legislation.

The meeting was also attended by Clyde Romney for Congressman Ron Packard, Charles O'Connell of the Department of Justice, and Joe Membrino and Anne Crichton of the Department of Interior.

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ROBERT J. GOLTEN

*ADMITTED ONLY IN VIRGINIA
**ADMITTED ONLY IN CALIFORNIA AND NEW YORK
***ADMITTED ONLY IN WISCONSIN

July 9, 1985

The Honorable Frank H. Murkowski
Chairman of the Subcommittee on
Water and Power
Committee on Energy and Natural
Resources
United States Senate
212 Senate Hart Office Building
Washington, D.C. 20510

Re: S. 403 and S. 426 - Hydroelectric Project Relicensing

Dear Senator Murkowski:

My letter to you of June 23, 1985 on behalf of the La Jolla, Rincon, San Pasqual, Pauma and Pala Bands of Mission Indians (Bands) expressed my clients' concerns regarding the pending bills to amend the relicensing provisions of the Federal Power Act. The Bands specifically requested that any bill reported by your Subcommittee include an exemption for Project No. 176. By letter to you dated July 5, 1985 from Donald R. Lincoln, Esq., the City of Escondido and the Escondido Mutual Water Company (Escondido) stated their disagreement with the Bands' position and their opposition to the Bands' proposal regarding an exemption for Project No. 176. The purpose of this letter is to respond to Mr. Lincoln's July 5th letter.

Mr. Lincoln states that the proposed legislation will have no effect on the proposed settlement involving the license for Project No. 176 and is unlikely to have any effect on the Project No. 176 relicensing proceedings. If Escondido believes that, one wonders why it would oppose an exemption for Project No. 176.

Lawyers can engage in endless debate regarding the relative importance of one factor or another in reaching a settlement of a complex dispute and can speculate forever about the "likely" outcomes of pending contested proceedings. This is not the appropriate time or place for such debate or speculation.

Three matters cannot be debated. One is that Escondido stands to benefit from the amendments to the relicensing provisions of the Federal Power Act that are proposed in S.403 and S.426. Second, the Supreme Court held in Escondido Mutual that the Federal Energy Regulatory Commission had erred in issuing a new license to Escondido because it had failed to take proper account of the conditions that the Secretary of the Interior deemed necessary for the adequate protection and utilization of the La Jolla, Rincon and San Pasqual Indian Reservations. As a result of that decision, if the controversy is not settled the Commission will have to make an entirely new determination regarding the relicensing of Project No. 176. Indeed, on remand from the Supreme Court's decision, the Court of Appeals for the Ninth Circuit agreed with the position advanced at that time by Escondido as well as the Commission that the remanded administrative proceedings "may result in a very different outcome." Escondido Mutual Water Co. v. FERC, 743 F.2d 1321, 1322 (9th Cir. 1984). Third, the Bands' position in the relicensing proceeding has been strengthened as a result of the Supreme Court's decision.

In light of these three factors, the proposed settlement and the terms of the contract under which Escondido was permitted to use the Bands' lands since 1924, the Bands believe that it would be unfair, unwise and unsound to change the rules governing the relicensing of Project No. 176. Any such changes would be especially unwarranted if they are predicated on one party's unfounded assumptions regarding the likely outcome of contested administrative proceedings and the relative importance of the provisions of existing law in reaching a tentative settlement of a highly complex dispute.

Mr. Lincoln also states that Indian interests are involved in more projects than the eight that are described in the Commission's 1972 report to a Senate Subcommittee. But Mr. Lincoln's letter ignores two crucial distinctions. The Bands' carefully limited their third alternative proposed exemption to "previously licensed projects within Indian Reservations." Emphasis added. In this context, "within Indian Reservations" is a term or art. In the Escondido Mutual case, the Supreme Court ruled that the term refers to projects with licensed facilities located on tribal lands within the exterior boundaries of Indian reservations and does not encompass projects that affect Indian interests. Most of the proceedings cited by Mr. Lincoln involve projects which may affect Indian water and/or fishery rights but are not "within" reservations as that word is used in the Federal Power Act. Moreover, several proceedings involve projects that have not been licensed. The third alternative exemption proposed by the Bands would not affect the projects in either category. I would also point out in this same connection that the Bands would be quite satisfied with their first alternative proposed exemption which would be limited to Project No. 176.

The Bands request that this letter be included in the record of the hearings on S.403 and S.426 and appreciate the Subcommittee's consideration of their special concerns.

Sincerely yours,

Robert S. Pelcyger

cc: The Honorable Mark O. Hatfield
The Honorable Daniel J. Evans
The Honorable Don Nickels
The Honorable Lowell D. Weicker, Jr.
The Honorable Bill Bradley
The Honorable Wendell H. Ford
The Honorable Howard Metzenbaum
The Honorable Alan Cranston, Att'n: Hal Gross
The Honorable Pete Wilson, Att'n: Jim Burroughs
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Mr. Franklin D. Ducheneaux
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Assistant Secretary, Indian Affairs
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May 23, 1985

Record

The Honorable Frank H. Murkowski
Chairman, Subcommittee on Water
and Power
Committee on Energy and Natural
Resources
United States Senate
317 Senate Hart Office Building
Washington, D.C. 20510

Re: S. 403 and S. 426 - Hydroelectric Project Relicensing

Dear Senator Murkowski:

On behalf of my client, the Confederated Salish and Kootenai Tribes of the Flathead Reservation, Montana (the "Tribes"), I wish to convey to you the Tribes' concerns over certain aspects of the above-captioned pending bills to amend the Federal Power Act with regard to the relicensing of hydroelectric projects. Specifically, the Tribes are concerned over the possible adverse impact of the proposed amendments on the pending settlement of a hydro relicensing proceeding recently achieved between the Tribes and the Montana Power Company ("MPC") and now awaiting the approval of the Federal Energy Regulatory Commission. In addition, if the settlement fails to receive the necessary FERC approval, the amendments could severely undercut the Tribes' position in the relicensing litigation when it is resumed, and specifically could deny the Tribes the right to compete for a new license for a project on their own reservation under the Federal Power Act as presently constituted. The Tribes ask that their concerns be adequately addressed in any bill voted out of the Committee. We ask also that this letter be included as part of the record of the hearings on the legislation which your Subcommittee has scheduled for June 11, 1985.

The Tribes' interest in the legislation stems from the Kerr Hydroelectric Project, a 180 megawatt facility located largely on lands on the Flathead Indian Reservation, in western

Montana, held in trust by the United States for the benefit of the Tribes. The project was licensed in 1930 by the Federal Power Commission to MPC. MPC's original 50-year license expired in 1980, and since then MPC has been operating the project under a series of annual licenses. In 1976 MPC and the Tribes filed competing applications for the new long-term license for the project. After part of the relicensing hearing was held last summer, and following many months of negotiations, MPC and the Tribes reached a settlement of the relicensing case. On March 29, 1985, the settlement was filed with FERC, where it now is pending.

The settlement provides for the issuance jointly to MPC and the Tribes of a new 50-year project license, with the project to be owned and operated by MPC for the first 30 years and by the Tribes for the remaining 20 years. At turnover, in 30 years, the Tribes are to pay MPC its net investment in the project. (In addition, as part of the settlement, the annual charge paid the Tribes by MPC under section 10(e) of the Federal Power Act for the use of Indian lands is increased from the current level of $2.6 million per year to $9 million escalated annually with inflation.)

The settlement, by its terms, can become effective any time before September 29, 1985, upon approval in its entirety by FERC. It also is possible, however, that FERC will approve the settlement only in a somewhat altered form, in which case the Tribes and MPC may have to renegotiate aspects of the settlement and its effectiveness could well be delayed by several months. FERC might also disapprove the settlement entirely, in which case the relicensing hearing will resume where it left off, with a substantial part of the hearing remaining to be conducted.

Once the settlement becomes effective, the Tribes have little reason to be concerned over the proposed Federal Power Act amendments. Until then, however, our concern with the pending bills is twofold: first, the settlement, which was achieved only after a massive effort by all involved, represents a very delicate balancing of competing rights and interests, all based on the Federal Power Act as presently constituted. Any change in the relicensing provisions of that law before the settlement becomes effective could undercut the entire premise of the settlement and cause it to come unraveled. Thus, any legislation enacted before the settlement becomes effective should contain language necessary to protect and preserve the settlement. Second, if the settlement is disapproved by FERC and the parties must resume their litigation, the pending relicensing legislation could dramatically alter the basis of the litigation and the parties' relative claims in the case. The parties would have to resume the litigation under different standards than those which governed the hearing initially.

The Tribes' specific concerns with the bills stem partly from the creation, in both S. 403 and S. 426, of an incumbent's preference on relicensing. S. 426 creates additional problems by dramatically increasing the compensation payable by a successful challenger to the incumbent. Rather than the "net investment plus severance damages" standard which now prevails (and which the Tribes' settlement incorporated), the challenger would have to pay a "just compensation," which appears to be roughly the equivalent of replacement value. (Since the Tribes do not come within the definition of a "municipality", the elimination of the municipal preference on relicensing presents no problem for them.)

As noted, the Tribes, in the event their settlement falls through, have a special claim to be able to continue to compete for the new license for the Kerr Project under the standards now applicable to relicensings, i.e., with no incumbent's preference and with a "net investment plus severance damage" compensation standard. This claim rests on the understanding on which, in 1930, the tribal lands were made available to MPC by the Tribes and their trustee, the Secretary of the Interior, namely that upon expiration of the license in 50 years, the project could be turned over to the Tribes as a going concern, almost fully amortized. This understanding is documented in a report prepared in connection with the original licensing by Assistant Commissioner of Indian Affairs J. Henry Scattergood, reprinted as S. Doc. No. 153, 71st Cong. 2d Sess. (1930). The report expresses the clear intent that after 50 years, the project could be turned over for the benefit of the Indians on payment to MPC of its net investment. (Id. at 9, 20 and 55-56.) (A copy of the report is enclosed.)

In this respect, hydroelectric projects using Indian lands generally are unique. While municipalities that are now competing for various new licenses usually had no involvement with the issuance of the original licenses and contributed nothing toward these projects, Indian tribes often did provide lands that helped to make projects feasible -- and, in the case of Kerr, the Indians provided most of the necessary lands. These were leased to the licensee subject to the approval of the Secretary of the Interior and subject to the conditions imposed by him.[1] The lease for Kerr was granted by the Tribes and their trustee based on the understanding of a turnover to the Tribes in 50 years. To alter the bargain at this late stage, just as the 50-year period ends, would be grossly unjust. The Tribes should be able to compete for the new license based on the original understanding.

Other than an exemption specifically aimed just at the Kerr Project, the Tribes' rights can be preserved by including in any of the proposed amendments an exemption from the amendments for any project a new license for which has already been applied for (by either the incumbent or a challenger) as of the date of the amendment. A savings provision such as the following would accomplish this:

> "The amendments made by this Act shall not apply to any project for which an application for a new license, whether filed by the existing licensee or another entity, is pending on the date of enactment of this Act."

Alternatively, an exception could be granted for projects which already are constructed using Indian lands, because of the bargain on which the use of these lands inevitably was based. This could be a accomplished with a savings provision such as the following:

> "The amendments made by this Act shall not apply to any project using tribal lands embraced within Indian reservations the original license for which was issued prior to the date of enactment of this Act."

One or another of these provisions is essential in any legislation enacted before the Tribes' settlement goes into effect, in order to avoid undermining the settlement or otherwise infringing on the Tribes' rights. Of course, if FERC acts promptly and favorably on the pending settlement, as we hope it will, the potential problems discussed in this letter will have been avoided.

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[1] Consistent with this, the Federal Power Act in various respects provides for special treatment and protection for Indian lands, as contrasted with public or private lands. See sections 3(1) and (2), 4(e), 10(e) and 21, 16 U.S.C. §§ 796(1) and (2), 797(e), 803(e) and 814.

I hope the foregoing proves helpful to your Subcommittee in its consideration of the relicensing legislation. I thank you for this opportunity to convey to you the Tribes' concerns and hope they can be properly accommodated if that should prove necessary.

Sincerely,

Foster De Reitzes

FDR/bjc
Enclosures

cc w/o encl.: The Honorable Mark O. Hatfield
The Honorable Daniel J. Evans
The Honorable Don Nickels
The Honorable Lowell P. Weicker, Jr.
The Honorable Bill Bradley
The Honorable Wendell H. Ford
The Honorable Howard M. Metzenbaum
The Honorable John Melcher
The Honorable Max Baucus
Mr. Russell R. Brown
Mr. William B. Conway
Mr. John Kandel
Ms. Ginny Boylan
Mr. Max Richtman
Mr. Ron Cooper

pp. 9-26-56

71st Cong. Senate Document
2d Sess. No. 153

FLATHEAD POWER DEVELOPMENT

Memorandum on the Development of Flathead River Power Sites, Mont.

May 23, 1930.

Prepared by J. Henry Scattergood,
Assistant Commissioner, Bureau of
Indian Affairs

John W. Cragun

71st Congress, 2d Session
SENATE
Document No. 153

FLATHEAD POWER DEVELOPMENT

MEMORANDUM ON THE DEVELOPMENT OF FLATHEAD RIVER POWER SITES, MONTANA

PRESENTED BY MR. WALSH, OF MONTANA

May 28, 1930.—Ordered to be printed with an illustration

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1930

PREPARED BY
J. HENRY SCATTERGOOD
ASSISTANT COMMISSIONER
THE BUREAU OF INDIAN AFFAIRS

FLATHEAD POWER DEVELOPMENT

DECEMBER 30, 1929.

Hon. RAY LYMAN WILBUR,
Secretary of the Interior.

Hon. FEDERAL POWER COMMISSION.

GENTLEMEN: You have before you for consideration applications for the development of Flathead River power sites, Montana, from (1) Rocky Mountain Power Co., of Montana, application No. 5; (2) Walter H. Wheeler, of Minneapolis, Minn., application No. 868.

Hearings upon these applications were held before the full commission beginning October 28, 1929, and lasting 11 days. The record covers 2,295 pages.

SPECIAL LEGAL PROVISIONS RELATING TO FLATHEAD

Under the act of March 7, 1928 (45 Stat. 212-213), provision is made—

> That the Federal Power Commission is authorized in accordance with the Federal water power act, and upon terms satisfactory to the Secretary of the Interior, to issue a permit or permits or a license or licenses for the use, for the development of power or power sites on the Flathead Reservation and of water rights reserved or appropriated for the irrigation projects.

And it is—

> *Provided further*, That the rentals from such licenses for the use of Indian lands shall be paid to the Indians of said reservation as a tribe, which money shall be deposited in the Treasury of the United States to the credit of said Indians and to draw interest at the rate of 4 per cent.

It has also been enacted in the act of March 4, 1929, that—

> The Federal Power Commission in issuing any permits or licenses for the development of power or power sites on the Flathead Indian Reservation in the State of Montana, as authorized by the act of March 7, 1928, is hereby authorized and directed to waive payment of the usual administrative fees or commissions charged under existing laws relating to or under regulations of said Federal Power Commission in the issuance of any such permits or licenses.

Thus in the case of the Flathead River power development on the Flathead Indian Reservation, Congress has made two unique provisions in addition to the general application of the Federal water power act. These are (1) that the permits or licenses shall be "upon terms satisfactory to the Secretary of the Interior," and (2) that the usual fees charged by the Federal Power Commission for administration and for use of lands shall be waived in favor of the Indians.

GENERAL PROVISION AS TO POWER SITES ON INDIAN RESERVATIONS

Under regulation 14, section 3, of the regulations of the Federal Power Commission, it is provided that—

> When licenses are issued involving the use of tribal lands embraced within Indian reservations, the commission will fix a reasonable annual charge for the

> use thereof, based upon the commercial value of the land for the most profitable purpose for which suitable, including power development. The charge shall commence upon date license is issued.

In order, therefore, to fix the proper rental basis for the use of Indian lands, it is necessary to determine the value of the power sites from their earning standpoint for power purposes. This involves a careful study of (1) the two applicants' proposals; (2) the actual earning power of the Montana Power Co. system, guarantor of one of the applicants; and (3) suggested modifications of the two applicants' proposals.

GENERAL DESCRIPTION OF THE FLATHEAD POWER DEVELOPMENT

The Flathead River power sites, five in number, and all within the Flathead Reservation, are among the most important undeveloped power sites of the United States. This is because of (1) the existence of Flathead Lake, a very large natural reservoir which can be very easily enlarged in capacity, and which will serve as storage for all five power sites; (2) the relatively low cost of development; (3) the possible development of Hungry Horse Reservoir upon the head waters of South Flathead River above Flathead Lake, and which would increase the potential capacity of all five sites by 50 per cent; (4) the additional power to be created at the existing Thompson Falls plant of the Montana Power Co. down the Flathead River below the five power sites by the immediate increased storage to be created by the raising of Flathead Lake and the eventual increase of this by the potential development of Hungry Horse Reservoir. Thus these Flathead sites form the key to a very large and cheap development.

Flathead Lake, southwest of Glacier National Park in northwestern Montana, lies on the western side of the Rocky Mountain watershed and is 120,000 acres in area. The south half of the lake is in the Indian reservation. By the building of a dam in the Flathead River Canyon about 4 miles below the present lake outlet, a head of 185 feet at site No. 1 can be developed, and the lake level can thus be raised about 10 feet so as to develop about 1,200,000 acre-feet. By dredging 3 feet from the present lake outlet the draw-down of the lake can be further increased so as to provide almost 1,600,000 acre-feet. Both applicants propose to build such a dam; one proposes also to do as much dredging as will create 1,400,000 acre-feet, giving 6,000 cubic feet per second. As will be shown later, one applicant estimates an average annual output of 68,000 horsepower, the other 105,000 horsepower, both of prime power. The immediate proposals concern site No. 1, but the ultimate development of the other four sites should together involve about as much additional power as site No. 1, the head for each site being as follows:

Site No. 2, 51 feet, located 5 miles below site No. 1.
Site No. 3, 26 feet, located 12 miles below site No. 1.
Site No. 4, 88 feet, located 39 miles below site No. 1.
Site No. 5, 17 feet, located 43 miles below site No. 1.

This would be based on Flathead storage alone and would be increased 50 per cent with Hungry Horse in addition.

THE APPLICANTS

Two present applicants under your consideration are:

(1) Rocky Mountain Power Co., a subsidiary of the Montana Power Co. and guaranteed by the latter. The Montana Power Co. is a very large and powerful company with capital of nearly $100,000,000 and with a long record of great success. It now operates nine hydro plants with total installed capacity of 327,750 horsepower, and a further capacity will shortly be completed of 60,000 horsepower. It described itself in the hearings as in urgent need of immediate further development to provide for its present service to the public and its constant growth. It was stated that by the time Flathead site No. 1 could be built its system could immediately absorb at least 50,000 horsepower. Mr. Kerr also indicated (p. 1141) that "for a short period, perhaps a year or so, we might be able to dispose of 30,000 horsepower to the West." This company has been an applicant for the Flathead power site since 1920 when the Federal water power act was passed. It is anxious immediately to fully develop site No. 1 by the installation of 150,000 horsepower.

The Montana Power Co. would, if granted the license, merge the Flathead power into its general system, and would connect it up so that not only all of its plants west (including Flathead) as well as east of the Rocky Mountains (p. 457) would be connected up together, but also they would be tied in with its allied companies to the west (p. 1350), namely, Washington Water Power Co., Pacific Power & Light Co., and also further west with Puget Sound Power & Light Co., a Stone & Webster Co. The first two, like the Montana Power Co. itself, are parts of the American Power & Light Co., which in turn forms one of the Electric Bond & Share Co. groups. The Montana Power Co. has offered a yearly rental to the Indians of $1 per measured horsepower.

(2) Walter H. Wheeler, of Minneapolis. Mr. Wheeler is a civil engineer of good standing and with an excellent record of accomplishment. He has been interested in the Flathead power development since 1927 and proposes to develop through a corporation to be formed all five sites through the sale of very cheap power, viz, at $15 per horsepower-year to new industries to be attracted there. These would be chiefly fertilizer and electrochemical plants which would use raw materials to be found in Montana and neighboring States. The sale of power to other than industrial plants would be only of secondary consideration in Mr. Wheeler's plans, although he would be prepared to sell wholesale to other power companies at the same rate. He expects that the industries would locate in close proximity to Flathead and that they would bring largely increased population, enlarged markets, and other material advantages to the neighborhood. Mr. Wheeler's plan, if successful, would also introduce new industries in competition with the Anaconda Copper Co. interests, which latter have always been very closely allied with the Montana Power Co. Mr. Wheeler expects, if granted the license, to be able to market the power from and also to finance the construction of not only site No. 1 at Flathead but also the other four sites by the attraction of new industries through his low-cost power offers. He claims this plan would call for a much higher load factor than the other applicant; in fact, he expects a continuous demand for all the prime power possible

to be delivered, and he estimates a much higher capacity for the Flathead development than the other applicant.

In point of time, if granted the preliminary permit, Mr. Wheeler hopes to proceed immediately to sign up parties to take the power and also to close with banking interests to finance the proposition. He would simultaneously complete preliminary borings and then proceed with construction work. It will, of course, not be possible for Mr. Wheeler to get the plant at site No. 1 in operation at as early a date as the Rocky Mountain Power Co. can even if all of his plans materialize, because that company has already made its preliminary borings and is ready now to do actual construction work. Mr. Wheeler has made an agreement with the Indians to pay an annual rental of $1.12½ per measured horsepower.

The Indian Bureau is limiting this memorandum regarding the two applications to an analysis of their power features and to necessary regulatory provisions for proper control in their relation to the question of rentals for the Indian power sites. No attempt is here made to consider the feasibility of the plans of either applicant for marketing the power or their respective ability to finance their proposals. For purposes of comparison these factors are here assumed. Nor is any effort here made to analyze the possibility or probability of applicant Wheeler's fertilizer and electrochemical industrial demands. It is our understanding that Government experts in these fields are being consulted on these subjects.

IMMEDIATE NEED OF MONTANA POWER CO. FOR ADDED CAPACITY AND ITS CONSEQUENT ANXIETY TO LEASE THE FLATHEAD SITE

There is one feature, however, which was stressed in the hearings, and being of large public interest in Montana, should be mentioned. This is the immediate need for a large amount of added capacity of the Montana Power Co. system. Mr. Kerr, its vice president, stated that because of the dry season last summer the company's reservoirs were at present very low and that a shut down this winter of some of their capacity seemed inevitable. Since the hearings this has actually resulted and already 40,000 horsepower has shut down. But it has not been only the water shortage that was the cause; even more of a factor was the fact that the company's load has outgrown its production capacity, as is also shown by the high utilization factor of 103 per cent in 1928. The company must immediately have another plant to render its service to the public. Being for a long time one of the applicants for the Flathead site, and waiting for the matter to be brought to a decision, it has not seen fit to make other present plans. In fact, from what Mr. Kerr represents, it would appear that it would be almost impracticable for the company to obtain from any other site than Flathead the amount of new power development that it must have as fast as construction can take place. Their other sites that are undeveloped are much smaller units and less desirable, and to fill the immediate and early future requirements more than one development would no doubt have to be made. As the Flathead is a cheaper as well as a larger site, it is naturally to their interests to develop that first. Mr. Kerr stated in regard to Flathead (p. 469): "It is the next logical one to be added to the present system." He then was asked by Secretary Wilbur: "Is it the most economical one to add?" and replied, "I think so, Mr. Secretary. The first cost of the plant is low, and it has a little disadvantage in transmission. But that is pretty much the case with what power is left, although there is a large amount of power left." The undeveloped power sites controlled by the Montana Power Co., and to which Mr. Kerr was referring, were shown later to be the following (pp. 1044–1047):

	Horsepower
Site C, Great Falls	40, 000
Canyon Ferry enlargement	40, 000
Canyon Ferry affecting other plants	13, 000
Fish Creek	24, 000
Snake River	40, 000
Total	157, 000

As stated, none of these are as desirable as Flathead, and none of them appear to be able to produce as much added capacity as the company immediately needs, nor to approach the capacity of even site No. 1 at Flathead, not to speak of the future ahead in the other four sites, should these be also obtainable. Mr. Kerr also stated (p. 1070) that Flathead "is the cheapest power at the power house."

The Canyon Ferry "redevelopment" was represented by Mr. Kerr (p. 1070) as "very close to the same cost (as Flathead), and far better located because it is in the center of the system." But thus to redevelop Canyon Ferry would first involve providing other capacity while it is out of commission during rebuilding, which Mr. Kerr stated (p. 479) could not be done. "We could not shut it (Canyon Ferry) down even if we wanted to, because we have got to have every kilowatt we can get, and we can not rebuild that plant or build another one." He later repeated (p. 1155) that he "did not think it would be a wise move. We can't afford to tear it down (Canyon, Ferry); but we have got to start something new." Even this plan he said (p. 1056) would only provide "five-eighths" of the capacity of Flathead. The shortage of present power for the system was stressed many times. (See pp. 460, 461, 466, 1567.) It is also to be noted that at Canyon Ferry a yearly charge must be paid to the Forest Service (p. 1136) for water stored in Hebgen Reservoir.

It is very clear, therefore, that the Montana Power Co., is very anxious that its next and immediate development should be at Flathead through its subsidiary, the Rocky Mountain Power Co. This is further shown by Mr. Kerr's expressed anxiety that if his company should be granted the license prompt decision should be made so that the work of enlarging the Newell Tunnel can be started in January, 1930, in order thereby to deflect the Flathead River in the low water season of 1930 and thus save a year's time in the construction of the dam and thus of the whole proposition. He stated that his company has a large construction gang that he could immediately start upon this work. So far as site No. 1 is concerned, there was no evidence to indicate that the Montana Power Co. does not need it, and is merely attempting to control it and "sit on it" without using it. The use of the other four sites is further referred to below.

FLATHEAD IS FIRST IMPORTANT POWER SITE ON INDIAN LANDS

The Flathead power development is the first important one upon an Indian reservation wherein power is the controlling factor. In the Coolidge Dam in Arizona power has, of course, been developed, but there it was only as an incidental factor in connection with a great irrigation and reclamation project. This Flathead case is therefore of great importance to the Indians in establishing principles. It has attracted wide attention, and at the hearings two United States Senators and two Congressmen addressed the commission. The Federal Power Commission itself is newly constituted and it has a new executive secretary and new general counsel. Accordingly it would seem unusually appropriate that special care be taken to develop the factors for regulation under the Federal water power act and upon terms satisfactory to the Secretary of the Interior, and for the preparation of a model lease.

In an ordinary power site lease under the Federal water power act there would be only two parties having an interest in the financial results of operating, viz, the successful licensee and the general consuming public. In such a case the power site is either purchased outright by the licensee, and its cost made a part of the developmental cost of the project, or if on Government lands other than Indian, the title to the site remains vested in the United States Government, and the site is leased for 50 years for the nominal fees charged by the Government by way of rental. In this latter case the licensee is saved the necessity of using any capital in the securing of the site.

✓ In the case of a power development upon Indian lands, the title to the site also remains vested in the United States Government but in trust for the Indian tribe, and the site is rented for the 50-year period of the lease to the licensee. Thus the licensee is here also saved the necessity of using any capital in the acquiring of the site, and in lieu thereof pays an annual rental to the Government for the benefit of the Indians. Thus in an ordinary Indian case there are three interests to be adjusted, viz, the successful licensee, the United States for the Indian tribe, and the general consuming public.

In the particular case of the Flathead there is a fourth interest, viz., a special part of the consuming public consisting of (1) individual Indian land holders and (2) white settlers who have bought Indian lands, which two groups together comprise the Flathead irrigation project. It is this irrigation project that is referred to in the legislation already referred to. Thus in the case of Flathead, the Federal Power Commission and the Secretary of the Interior are called upon to make an adjustment between four interests, viz, (*a*) the successful licensee, which is, of course, entitled to the usual return of 8 per cent under the practice of the Montana Public Service Commission; (*b*) the Indian tribe, which is entitled to a fair rental for the use of the power sites; (*c*) the particular part of the public forming the irrigation project, and to which certain low rates for power up to 15,000 horsepower have been promised by one applicant as further explained below; (*d*) the general consuming public.

CORPORATE SET-UP AND COMMISSION REGULATION

Under the Wheeler set-up, there will be a very simple plan of incorporation and of Federal and State commissions' regulation. Applicant Wheeler proposes to have one corporation which will be the licensee of the Federal Power Commission. Its securities are to be issued for actual values only and there is to be no bonus stock. It will be directly subject in its engineering and accounting features to the Federal Power Commission. Its rates made to consumers will, of course, have to be filed with the Montana Public Service Commission.

In the case of applicant, Rocky Mountain Power Co., however, the situation involves two corporations and is more complicated. There will be the Rocky Mountain Power Co., which will be the holder of the Federal license and which will be the generating company. There will also be the Montana Power Co., of which the Rocky Mountain Power Co. will be a controlled subsidiary. The latter's financing and performance are guaranteed by the former. The Montana Power Co. will buy the current (except 15,000 horsepower reserved by the United States as explained below) from the Rocky Mountain Power Co., presumably at the latter's plant, and will transmit and sell same to its consumers. The Rocky Mountain Power Co. will, as stated, hold the Federal license and be accountable to the Federal Power Commission. The Montana Power Co. will be subject to the regulations of the Montana Public Service Commission, as will also the Rocky Mountain Power Co.

It is suggested that the regulation of these two interlocking corporations be accomplished, and the conditions herein stated be appropriately set forth in the license, if granted to this applicant, as follows:

(1) That the Rocky Mountain Power Co. be required to continue its separate existence under the regulations of the Federal Power Commission, and that it shall not be allowed to merge with any other corporation without the approval of the Federal Power Commission.

(2) That the securities of the Rocky Mountain Power Co. be issuable only under regulation of the Federal Power Commission. The Montana State law does not give to the Montana Public Service Commission jurisdiction over the issuance of securities. Hence, the Federal Power Commission upon its own motion can and should properly assume said jurisdiction over these security issues.

(3) That the legitimate investment in the project including prelicense costs of Rocky Mountain Power Co. as determined by the Federal Power Commission under the law and its regulations, shall be accepted as the base upon which return of said Rocky Mountain Power Co. is to be calculated, and that the license shall so provide.

(4) That said return allowed Rocky Mountain Power Co. shall be limited to the percentage allowed from time to time by the Montana Public Service Commission in its regulation of public utility companies. At present this is 8 per cent.

(5) That to accomplish this limitation of return a suitable contract be required between Rocky Mountain Power Co., the seller of the electricity, and Montana Power Co., the buyer of same. Said contract to be satisfactory to the Federal Power Commission and to be filed by said companies for approval by Montana Public Service

Commission. Said contract to arrange for fixing from year to year or as may be satisfactory to the Federal Power Commission the intercompany price of electricity but always at a price sufficient and only sufficient to cover the Rocky Mountain Power Co.'s expenses, overhead, repairs, taxes, insurance, depreciation and obsolescence, amortization, rentals to Indians, and a reasonable return. Said contracts also to provide that all electric current generated by Rocky Mountain Power Co. shall be sold to and bought by the Montana Power Co. with the exception of a maximum of 15,000 horsepower as may be required, to be reserved for sale to the United States Government for account of the Flathead irrigation district in its various parts, as more fully described below.

(6) That all of the common stock to be issued by Rocky Mountain Power Co. be subscribed for by Montana Power Co. and be retained by same unless and until authorized by Federal Power Commission to sell same.

(7) That voting power in the Rocky Mountain Power Co.'s securities be limited to its common stock, all of which will be held as above provided in the ownership of Montana Power Co.

It may be said that this plan is substantially in accordance with the precedent of the Conowingo case in its regulation by the Federal Power Commission and the State commissions concerned. The above arrangement will put full control in the hands of the parent company, where it belongs. It will also provide under regulation by the Federal Power Commission a full return (at present of 8 per cent) on the Rocky Mountain Power Co.'s actual investment after payment of all expenses and rentals to the Indians. And it will bring to the Montana Power Co., under regulation by the Montana Public Service Commission, all of the revenues obtained by it from the resale of the electricity which will be sold to it, as generated by the Rocky Mountain Power Co.

(8) That any and all contracts of Montana Power Co. with Electric Bond & Share Co. or others for management and supervision of its affairs, or for construction, which involve the Rocky Mountain Power Co. and the Flathead project shall be subject to review and approval of the State and Federal commission. This is a very important feature of regulation at the present time, and it is one to which the State commissions pay very little attention. It is possible, under present conditions, for a large part of the revenues of a public utility controlled by a holding company to be diverted directly or indirectly to the controlling company or its affiliated concerns through the payments of fees, commissions, refunds of expenses, reimbursement for salaries, payments of overheads, etc.

(9) That bearing in mind the special powers vested by law in the Secretary of the Interior in this case, provision should be made for the complete amortization of the entire development cost within the 50-year period of the lease. This can readily be done by the requirement and allowance as an annual operating expense of a charge of 0.6 per cent to be used annually either (1) to create a sinking fund for the purchase and keeping alive the securities of the licensee until fully redeemed, or (2) to build up an amortization fund to be annually invested and kept invested. This amount of 0.6 per cent will be large enough to pay off the whole investment at the end of the 50-year lease if annually invested at about 4¼ per cent or better. This would

enable the project in addition to the annual rental to the Indians to pay itself off during the lease and to be turned over to the Government for the Indians as a going concern, to be at that time retained or released as may seem best.

SUGGESTED METHOD FOR FIXING RATE OF INDIAN RENTALS WHICH ARE FIRST SET UP FOR 20 YEARS WITH REVISIONS THEREAFTER EVERY 10 YEARS

Under section 6 of regulation 14 of the Federal Power Commission it is provided that Indian rentals "may be readjusted at the end of 20 years after the beginning of operation and at periods of not less than 10 years thereafter in a manner to be prescribed in each license." This regulation thus calls for a prescription for calculating the Indian rental. The Indian Bureau accordingly submits in this memorandum a suggested pro forma method of making this calculation to be used (1) in fixing the original rental for the first 20-year period; (2) for later readjustments; (3) for each additional Flathead site as and when developed.

The suggested method consists of determining (1) the estimated and later the actual average annual generating cost, including return but excluding rental per horsepower year; (2) the fixing by the Federal Power Commission of a fair wholesale bus bar price for the current generated at each Flathead site. In the case of Wheeler application, the applicant himself has proposed the single price of $15, which it would seem in justice to the value of the site and the interests of the Indian could not be made lower. In the case of the application of the Rocky Mountain Power Co., the commission would have to determine in the light of all the circumstances what would be a fair wholesale intercompany price at the bus bar of each site, of electricity generated and sold by Rocky Mountain Power Co. to its parent company, Montana Power Co. (3) The difference between the annual average generating cost so found and the intercompany price so determined represents the economic rental value of the site, and should be divided between the Indians and the general public in proportion to their respective interests. This pro forma method of calculation would thus fix the rate of rental for the period of the lease in question. The amount of rental based upon this rate will then be calculated and paid to the United States for the account of the Indian tribe under accounting supervision of the Federal Power Commission, said amounts to be found by using this rate upon the monthly measured kilowatt-hours generated at each plant. We suggest that payments of rentals should be made preferably monthly, but certainly at least quarterly.

RF-W

PRO FORMA METHOD OF FINDING ANNUAL GENERATING COST

To determine item (1) above of fair annual average generating cost, the method suggested is set out in the accompanying comparative table marked "Flathead Power Applications—Analysis of Power Features for Site No. 1." (See table following p. 48.) In this table are set out in parallel columns: (1) The estimates of the two applicants; (2) the actual showing for the year 1926 of the Montana Power Co., as taken from its report to Federal Power Commission; (3) Indian

Bureau adaptations, as explained below, of the two applicants' set-ups. In each column are stated the following factors which are involved:

I. The factors affecting power capacity:
  (1) Water flow and storage.
  (2) Lake levels.
  (3) Head.
  (4) Efficiency factor.
  (5) Utilization factor.
  (6) Result in power capacity.
  (7) Installation.
II. Development costs:
  (1) Direct expenses.
  (2) Overhead expenses.
  (3) Interest during construction.
  (4) Financing cost.
  (5) Development cost.
  (6) Newell Tunnel.
  (7) Dredging.
  (8) Development cost per horsepower.
III. Annual generating costs;
  (1) Operating expenses.
  (2) Overhead expenses.
  (3) Repairs.
  (4) Taxes, insurance, etc.
  (5) Depreciation and obsolescence.
  (6) Amortization.
  (7) Return and excess earnings.
  (8) Annual generating costs per horsepower-year, including 8 per cent return at Flathead.

We will now briefly discuss these in order, and will refer in each factor to the two applicants' proposals.

I. Factors Affecting Power Capacity

By way of preliminary explanation, the Federal Power Commission defines average output of prime power (see line 7 of table) as "power capacity." Regulation 1, Section 15, reads: "The 'power capacity' of a project means the continued product of—

"A. The factor 0.08.[1]

"B. The average static head in feet; and

"C. The water supply in cubic feet per second and not in excess of the hydraulic capacity of the approved project works, estimated to be available from natural flow or from storage, or from both, for 90 per cent of the time."

(1) *Water flow and storage.*—The Geological Survey and Federal Power Commission surveys have completely covered this subject and repetition here would be useless. Suffice it to say here that the flow of Flathead River out of Flathead Lake for the years 1908 to 1924 was—

	Cubic feet per second
Minimum discharge	1, 360
Average discharge	11, 460
Maximum discharge	75, 400
90 per cent of time discharge	2, 550

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[1] The factor 0.08 represents the horsepower at 70 per cent efficiency of 1 cubic foot of water per second falling through a head of one foot.

Flathead Lake has an area of 1,200,000 acres. Its elevation ranges from 2,882 to upwards of 2,893 feet above sea level. At levels above 2,895 prohibitive damages to farms at the head of the lake would be occasioned, so that the engineers are not calculating upon the high level of the lake being above this point. On the other hand the low level could be reduced to 2,875 feet by dredging down the outlet of the lake. Very strong protests were presented by the town of Polson and others against dredging below 2,880. The possible range of draw down would seem, therefore, to be limited to 13 feet. Various studies of storage acreage have been made. Between 2,883 and 2,893, the range proposed by Rocky Mountain Power Co., these show:

	Acre-feet
By using Columbia River Board table	1,243,000
By Rocky Mountain Power applicant	1,160,000
By study of Federal Power Commission engineer	1,206,000

The capacity between 2,880 and 2,893 feet is 1,582,000 acre-feet as calculated by the Federal Power Commission's engineer, and 1,600,000 acre-feet as per Columbia River Board.

Applicant Rocky Mountain Power Co. calculates that the draw down of 10 feet between 2,883 and 2,893 levels will supply 5,400 cubic feet per second flow 90 per cent of the time. Applicant Wheeler proposes to dredge the outlet of the lake to 2,882 which he calculates will supply 6,000 cubic feet per second 90 per cent of the time. He estimates this dredging will cost $100,000.

During the hearings much discussion was had as to possible damages of various kinds at the head of the lake, especially those caused by floods in the upper river causing the lake to rise above the 2,893-foot level. It was shown that this difficulty could be largely obviated by enlarging the lake outlet by dredging, so as to enable the carrying off of the floods faster than can now be done with the outlet as it is. This important reason, together with the development of greater storage in accordance with the conservation principle of developing all power possible, would seem to be of such paramount consideration as to demand that dredging be done. This could be made a condition of the license to be done at the beginning or later. In either case it seems to the Indian Bureau so certain that dredging will be done that in calculating for the period of 20 years it feels safe in assuming a flow of 6,000 cubic feet per second as a minimum for 90 per cent of the time. It is to be noted that if the full draw down of 13 feet were thus to be made available the 1,600,000 acre-feet storage would create 6,400 cubic feet per second. Applicant Wheeler proposes to dredge for only 11 feet draw down, creating 6,000 cubic feet per second, and this basis seems conservative for the Indian rental calculation.

Revision.—The above was written before the determinations of the Federal Power Commission as to lake levels and estimated flow became available to the Indian Bureau on January 3, 1930. Accordingly it became necessary thereafter to revise this figure of 6,000 cubic feet per second to 5,440 cubic feet per second and to revise in accordance therewith the resulting calculations in this memorandum. This figure of 5,440 cubic feet per second arises from an expected storage of 1,200,000 acre-feet. However, the commission proposes at this time to guarantee only 1,100,000 acre-feet of storage using 10 feet of storage somewhere between levels 2,880 and 2,893. This cautionary procedure seems necessary until experience will later show (1) the amount of dredging needed and possible and its results, (2) the water levels in the lands at the head of the lake, (3) the effects of floods on the lands at the head of the lake.

(2) *Lake levels and dredging.*—These have already been covered under (1).

(3) *Head and dam.*—Both applicants propose to build a dam about 4 miles down Flathead Canyon below the outlet of Flathead Lake. This is known as site No. 1 or "Newell" site, the latter because it is here that the Newell Tunnel was cut in 1911 by the Government to provide a small power development for pumping for the Flathead irrigation project. The static head to be produced at this site will be 185 feet. This figure has been used by Rocky Mountain Power Co. Wheeler uses effective head of 175 feet in his calculations. In Indian Bureau calculations 185-feet static head is used in accordance with the commission's formula.

In the plans of the Rocky Mountain Power Co., the dam will be constructed so that the top will be at elevation 2,875, with 18 feet of flashboards to bring the level up to 2,893.

(4) *Over-all efficiency factor.*—This represents the actual as compared to theoretically perfect output of water wheels and electric machinery. It covers losses in water regulation, entrance losses, conduit losses, gate losses, penstock losses, generator losses, and transformer losses. The formula used by the Federal Power Commission for its calculation of power capacity is based on 70 per cent efficiency with 100 per cent utilization factor. It was admitted by the engineer of Rocky Mountain Power Co. (pp. 1619 and 1624) that this basis is conservative. It is the basis used for calculating the Government fees, and is lower than is generally obtainable and obtained in power projects. A good deal of discussion took place in the hearings over efficiency factor and utilization factor, and their consequent effect on power capacity. The Rocky Mountain Power Co.'s estimate is admittedly conservative in both these regards, while Wheeler predicts very high figures for both factors. The former claimed only 70 per cent efficiency and 85 per cent utilization, or a total of 59½ per cent; while the latter predicted 87½ per cent efficiency and 100 per cent utilization, or a total of 87½ per cent. These small claims of the Rocky Mountain Power Co. were in the face of repeated statements that it would be in a position not only to do as well as any other developer of the site (pp. 345, 1331) and use every kilowatt-hour that could be developed (pp. 477, 1146, 1154), but also that it could make even better use of it than could an independent applicant. This would be because of the diversification of its own existing system (p. 1350) with which it would be hooked up, and also because of some of it being east and some of it being west of the Rockies with differing run-off periods (pp. 475, 452, 458, 148); and also because it would be tied in with Washington Water Power Co. and Pacific Power & Light Co., its allied companies, as well as Puget Sound Power & Light Co. of Seattle, all to the west with their still further different periods of run-off. Because of the combining of these "pots" of power it was claimed that every possible use of the site could be better developed than otherwise (p. 1352).

In the lengthy discussions of over-all efficiency in the hearings, several cases were cited of high efficiency up to 88 per cent. Mr.

Cochrane said the Montana Power Co.'s Volta plant, built in 1915, has 74 per cent efficiency and that new machinery would be about 2 per cent higher (p. 1504). No one will know better than the Executive Secretary of the Federal Power Commission, Mr. Bonner, about efficiency factors of varous plants. His own recently published book on "Water Powers of California" shows an average of plants in that State, similar in general characteristics to flathead, of 77 per cent. In this and in the utilization factor, the Indian Bureau is desirous of being safe and conservative in any proposals that it makes for the calculation of the Indian rentals. Accordingly, it feels safe in suggesting 77 per cent for the over-all efficiency factor for this calculation, believing that this figure will certainly be exceeded in the average during the first 20 years of flathead operation. (See also page 1505 for Mr. Bonner's discussion of these factors.)

(5) *Utilization factor.*—This factor indicates the amount of water actually used related to the water available; in other words, a ratio between output and prime power. Applicant Wheeler claims that the kind of load that he will have in large plants with continuous demand will enable him to use all the available water up to the prime capacity and thus have a utilization factor of 100 per cent. In addition, he expects to dispose of some secondary power produced at periods of excess water flow. Rocky Mountain Power Co. on the other hand presents a utilization factor of 85 per cent, which Mr. Cochrane, the chief engineer, explained as the average of the past 10 years plus 5 per cent for the diversification feature produced by the different run-off times west and east of the Rocky Mountains (p. 1578). Mr. Cochrane claimed a low percentage of use of plant capacity in order to allow for times when their plant capacity would be ahead of their market. As the market increases it catches up to the plant capacity (prime) and may even exceed it as was the case in 1928. On page 1706 the actual figures of the Montana Power Co. for the last 10 years were represented as follows:

Year	Prime power	Average load	Utilization factor	Year	Prime power	Average load	Utilization factor
	Kilowatts	*Kilowatts*	*Per cent*		*Kilowatts*	*Kilowatts*	*Per cent*
1919	156,600	98,000	[1] 63	1924	156,600	128,000	82
1920	156,600	123,000	[1] 78	1925	163,100	140,000	86
1921	156,600	65,000	42	1926	163,100	156,000	96
1922	156,600	110,000	70	1927	185,100	156,000	89
1923	156,600	128,000	82	1928	173,300	181,000	[2] 105

[1] Dry year.

[2] Wet year.

Mr. Kerr, in speaking of the steady growth of the Montana Power Co. system, said "and it seems now that it makes no difference whether we get 10 per cent business, 20 per cent business, or 40 per cent business, it all gets back to the power houses; and the load factor year by year is growing higher and higher, meaning the more complete use of the equipment." ✓

In view of this unusually uniform load of the Montana Power Co. system and this steady growth, it would seem conservative to take the average of the utilization factors for the last five years, namely, 91 per cent, as a proper figure for use in calculating the

Indian rental, and not go back 10 years which includes the very low year 1921 with 42 per cent utilization factor. That this figure of 91 per cent is very conservative is shown by the fact that the 5 per cent additional factor used by Mr. Cochrane for diversification feature might also be added for Flathead but is not included.

A further proof of conservatism in the suggested use of efficiency and utilization factors of 77 per cent and 91 per cent, respectively, is found in the fact that their combined effect is to give an efficiency of 70.07 per cent as compared with the admittedly conservative basis of 70 per cent used in the formula of the Federal Power Commission.

(6) *Resulting power capacity.*—Using the above factors as per the commission's formula, we have:

	Estimates as submitted			As adjusted above		
	Horsepower	Kilowatts	Kilowatt-hours generated	Horsepower	Kilowatts	Kilowatt-hours generated
Rocky Mountain Power Co.	68,000	51,000	[1] 446,000,000	[1] 80,500	60,375	528,885,000
Wheeler	105,000	78,750	689,000,000	[2] 105,000	78,750	689,000,000
				[3] 95,000	71,250	624,000,000

[1] Basis of 5,400 cubic feet of water.

[2] Revised basis of 5,440 cubic feet of water.

[3] Basis of 6,000 cubic feet of water.

For comparison the actual figures for the Montana Power Co. system for 1926, 1927, and 1928 are also added:

	Horsepower	Kilowatts	Kilowatt-hours generated
Montana Power Co.:			
1926	217,400	163,100	1,375,306,770
1927	217,400	163,100	1,362,157,457
1928	233,700	175,300	1,584,078,104

(7) *Installation.*—The Rocky Mountain Power Co. proposes to install three units of 50,000 horsepower each, making a total of 150,000 horsepower. It will also provide space and tunnel capacity for a fourth unit of 50,000 horsepower for possible further use of water flow. (See p. 1322.)

Wheeler proposes the same total installation of 150,000 horsepower, but in four units.

Figuring power capacity, that is, average power as calculated above to installed capacity, the ratios are:

	Estimates	As adjusted
	Per cent	*Per cent*
Rocky Mountain Power Co.	43	59
Wheeler	70	70
Montana system		[1] 71

[1] Actual.

II. DEVELOPMENT COSTS

The applicants' estimates are as follows:

	Rocky Mountain Power	Wheeler
Preliminary surveys and drilling	$40,000	$52,000
Roads and railroad	210,000	218,000
Camp and equipment	180,000	150,000
Construction plant	496,000	450,000
Cofferdams		175,000
River diversion	254,000	
Dam	1,254,000	1,312,000
Intake	190,000	
Pressure tunnels	398,000	
Tailrace and widening channels	73,000	
Tunnel and trash racks		425,000
Power house	540,000	606,650
Hydraulic machinery	264,000	1,700,000
Electrical machinery	1,196,000	
Miscellaneous power-house equipment	80,000	
Newell Tunnel purchase	801,000	
Dredging lake outlet		100,000
Land and drainages, etc	434,100	500,000
General expenses of construction	775,700	
Engineering and contingencies		$300,000
Overhead expenses		550,000
Insurance, etc		100,000
Contractor's profit		300,000
		1,250,000
Interest during construction	915,000	1,000,000
Cost of financing		873,180
"Development cost"	692,100	
Total	7,967,800	8,811,830

(1) *Direct expenses of development.*—The direct estimates of the two applicants are thus seen to be remarkably close together on the direct expenses of development and do not call for comment here.

(2) *Overhead expenses, including cost of financing.*—Both applicants appear to have figured liberally for overhead, especially Wheeler. In the case of Rocky Mountain Power Co. the figure of $775,700 is more than 13 per cent of the actual construction items. No doubt this includes contractor's profit, not mentioned separately, and perhaps also some additional prelicense costs beyond the $40,000 for preliminary survey and borings as listed. Wheeler's figure of $1,250,000 is nearly 22 per cent of actual construction items, and taken in conjunction with his high cost of interest during construction of 14 per cent and his cost of financing of 11 per cent (which through its high credit the other applicant is saved), he has total overhead of $3,123,180 on top of direct construction costs of $5,688,650, nearly 55 per cent. If these figures are not overestimates, this heavy loading on the development cost will handicap Wheeler as contrasted with the Rocky Mountain Power Co.'s cost as corrected below to the extent of about $12 per horsepower capacity, assuming Wheeler's output for both in order to make the comparison. This would be reflected in an annual handicap of about $1.70 per horsepower per year, assuming other factors the same for both applicants. On the reasonable assumption that the two applicants, in spite of their respective claims, can develop about the same output at about the same costs, this loss of $1.70 per horsepower per year would be very serious if it should result in the diminishing the Indian rental by even one-half of such an amount.

In this connection attention may be called to the agreement between Wheeler and the Flathead Indian Tribal Council (see Wheeler Exhibit 3) made in December, 1927, in which that council agreed to accept Wheeler's offer of $1.12½ per developed horsepower. This agreement has of course no standing in law, because the Secretary of the Interior alone has the legal right to bind the Government in ✓ its trust for these Indians. Naturally the Indians have never been then or now in a position to analyze the actual earnings of their power sites, and it would manifestly be unfair to them and to their interests for the Secretary now either to confirm on their behalf the bargain they themselves made two years ago, or to fail to take into consideration the above-mentioned handicap in annual power cost. This disadvantage of Wheeler will thus have to be weighed against the advantages that Wheeler's plan, if successful, would bring to the Indians in added opportunities for remunerative employment in the new industries to be established on or near their reservation, improved market for their products, etc.

It is to Wheeler's disadvantage that his amount of actual investment to be fixed by the commission will be more than $1,250,000 ✓ higher than the other applicant's, and that this will be just that much more to be amortized during the 50 years' lease. This factor is included, however, in the annual cost comparison that follows.

(3) *Interest during construction.*—Both applicants appear to be high in their estimates as to interest. The Rocky Mountain Power Co.'s estimate is $915,600; Wheeler's, $1,000,000. The usual estimate for this item is 6 per cent for half the construction period and some commissions allow four months additional. For three years' construction period this basis would mean 11 per cent for interest during construction. The above estimates of the applicants are about 14 per cent. However, the licensee in the final accounting of the net investment will be allowed under the commission's regulations, all the interest actually paid and no more. We therefore suggest no modifications.

(4) *Financing cost.*—(See under (2) overhead expenses, above.)

(5) *Development cost.*—In the estimated cost of the Rocky Mountain Power Co. there is an item of $492,100 put down as "Development cost" and explained on its Exhibit 10 as follows: "Development cost is the accumulated deficit below a fair return on the invested capital up to the time that a fair return begins."

This subject was discussed in the hearings (see pp. 1418, 1422–1428). It was made clear that under the Federal water power act only expenditures actually made can form a part of the "net investment" or project cost. As this item is only an estimate of alleged lag in return on this investment, and is not money paid out, there is no basis for its inclusion. Mr. Brown, counsel of the commission (p. 1428), asked the applicant to submit in its brief its view and authorities sustaining it, if it had any.

As the brief is silent on the subject, presumably none could be found. Accordingly, this item is omitted in the adjusted computation for calculating Indian rental.

(6) *Newell Tunnel.*—The Rocky Mountain Power Co. has offered (see Flathead irrigation district Exhibit 13, sec. D) to refund the Government $101,000 for its cost in constructing the unfinished Newell Tunnel. The applicant finds it to its advantage to complete

the small remaining unfinished part of the tunnel, and then to enlarge it and line it for use in the project. The Flathead River will be deflected through it during construction of the dam according to their plan. If it were not there already, another tunnel would have to be built. This tunnel was built by the Government in connection with the Flathead irrigation project and its cost charged against the project as reimbursable. If this amount is received by the Government, it will be credited to the irrigation project.

In Mr. Wheeler's proposals there appears no mention of the Newell Tunnel or whether he would pay anything for its use.

(7) *Dredging.*—The need of dredging the outlet of Flathead Lake has already been explained. Mr Wheeler has carefully confirmed (p. 2169) his original estimate of $100,000, as the cost of doing this work. The Rocky Mountain Power Co. did not plan to do this dredging, but stated its willingness to do so if required by the commission (p. 1220, 1325). On the assumption that this dredging will be done, the estimated cost of $100,000 should, therefore, be added to the Rocky Mountain estimate and this is done in the adjusted figures for calculating Indian rental.

(8) *Development cost per horsepower.*—After thus making the two adjustments of the Rocky Mountain estimate, viz., eliminating $492,100 for "development cost," and adding $100,000 for dredging the outlet of the lake, the following are found to be the comparable figures.

Rocky Mountain Power Co.:	
Estimate	$7,947,500
Adjusted	7,555,400
Wheeler	8,611,830

Dividing these by the respective power capacities, we reach the conclusion of the development cost at Flathead per horsepower or kilowatt as follows:

	Investment cost	Average prime power capacity horsepower	Investment cost	
			Per horsepower	Per kilowatt
Rocky Mountain Power Co.:				
Estimate	$7,947,500.00	68,000	$116.87	$155.83
Adjusted	7,555,400.00	80,500	93.85	125.13
Wheeler:				
Estimate	8,611,830.00	103,000	83.92	111.69
Adjusted (5,440 cubic feet of water)	8,611,830.00	93,000	92.76	123.68

For comparative purposes, the Montana Power Co. system is here added. The investment cost figures are taken from the company's report for 1926, made to the Federal Power Commission.

	Investment cost	Average prime power capacity, horsepower	Investment cost	
			Per horsepower	Per kilowatt
Montana Power Co. system:				
1927 [1]	$28,374,074.00	[2] 233,700.00	$121.41	$161.88
1926	27,636,633.00	[3] 217,467.00	127.04	169.39

[1] Later figures not at hand. [2] Year 1926. [3] Year 1925.

III. ANNUAL GENERATING COSTS

(1) *Operating expenses.*—The Rocky Mountain Power Co. estimates this item at $63,000 which is 0.8 per cent upon their development estimate of $7,947,500 and 0.85 per cent upon the adjusted figure of $7,555,400. Minor repairs are probably included. Mr. Wheeler figures his operating expenses at 1½ per cent of his development estimate, making $132,177.45. He also added one-half per cent for repairs, $44,059.05. These Wheeler figures seem very high when compared with the actual experience of the Montana Power Co. as given below.

(2) *Overhead expenses.*—The Rocky Mountain Power Co. estimates this item also at $63,000, which is 0.8 per cent upon their development estimate of $7,947,500 and 0.85 per cent upon the adjusted figure of $7,555,400. Mr. Wheeler figures his overhead expenses at 1 per cent of his development estimate, making $88,118.35, which is clearly high.

(3) *Repairs.*—See under (1) above.

(4) *Taxes, insurance, etc.*—The Rocky Mountain Power Co. estimates this item at 2 per cent of their development estimate, making $158,940. In the adjustment the rate of 2 per cent is retained; applied to adjusted development estimate it gives $151,080. Although this is the company's own rate, it is lower than the rate for all taxes in the Montana Power Co. system as given below. Perhaps the explanation is that the company's practice apportions to generation, etc., only the property taxes. Its New Jersey corporation tax, Montana State license tax, and Federal taxes on income, etc., are not apportioned. In the figures used below, however, Mr. King, the commission's accountant, included all taxes, apportioning them in the same ratios as the company's apportionment of property taxes.

Mr. Wheeler estimates his taxes, insurance, etc., at 1½ per cent, making $132,177.45. This probably is too low, in view of the above.

(5) *Depreciation, obsolescence.*—On this item, Rocky Mountain figures 2 per cent on development estimate, making $158,940. In the adjustment, the 2 per cent rate is retained; applied to adjusted development estimate, it gives $151,080. There was some discussion in the hearings upon the proper rate for depreciation, where major repairs should be charged, etc. Mr. Cochrane, the company's engineer, expressed the belief that 2 per cent was about right for an overall charge for all classes of property. This would include major repairs and obsolescence. The rate of 2.07 per cent for generating plants, including dams, of the Montana Power Co. system was recommended by their appraisal engineer, Mr. W. J. Hagenah, of Chicago, as of December 31, 1922. However, the actual amounts charged annually for depreciation upon the books of the company have been much smaller round sums; thus the $350,000 for all property in 1926 was at a rate of about three-fourths of 1 per cent. For further details see below under Montana Power Co., actual 1926.

We understand that the Federal Power Commission has not as yet determined or adopted a rate for depreciation and obsolescence. Although the 2 per cent rate seems high, and although it is not in the public interest, nor to the interest of the Indians, to build up an unnecessarily large depreciation fund, yet in the absence of further information, it seems wise to use the company's own suggestion of

2 per cent for the pro forma calculation of the Indian rental. It may be added, however, that it is to the interest of the Indians that the property be fully maintained and kept modern in view of the proposal for amortization within the 50-year period of the lease. The depreciation and obsolescence fund should therefore be large enough to accomplish this, without furnishing any excuse or justification for the licensee to let the property run down in the closing years of the lease. Any balance remaining in the depreciation fund at the close of the lease would of course be subject to the regulations of the commission.

Mr. Wheeler has estimated 3 per cent for sinking fund, a total of $264,354.90. This liberally covers depreciation, obsolescence, and amortization, which latter is referred to more particularly in the next section. In the adjustment for Indian rental calculation, Wheeler's 3 per cent is adjusted and divided between depreciation, obsolescence at 2 per cent and amortization, 0.6 per cent, reduced from 1 per cent.

(6) *Amortization.*[1]—Rocky Mountain Power Co. did not estimate an item for amortization separate from whatever may have been assignable to this from depreciation and obsolescence. Mr. Wheeler, as stated above, estimated 3 per cent for sinking fund, manifestly intending to cover amortization.

As already explained above, the Indian Bureau strongly recommends the establishment of an annual operating charge to be set aside in an amortization fund to be kept invested or to be used as a sinking fund for the redemption of the licensee's securities, said securities then to be kept alive in said sinking fund until all the securities are fully redeemed. This can be done[1] in this first Indian rental case under the special powers vested in the Secretary of the Interior. And it is especially appropriate in connection with the plan proposed in this memorandum for corporate set-up and regulation, under which the licensee will be limited to the allowed return upon the net investment after payment of all operating charges, depreciation, amortization and rental. Under this plan, it is to be noted that there will not develop either before or after 20 years, any "excess of a specified reasonable rate of return upon the actual, legitimate investment of a licensee," the disposition of which is provided for under the water power act and under regulation 17 of the commission. Under the year-to-year accounting to the Federal Power Commission, the licensee will be limited to the fair return of 8 per cent through the fixing of the wholesale rate to be charged to the parent company in the case of applicant Rocky Mountain Power Co., or to his own wholesale price of $15 to consumers in the case of applicant Wheeler, either case of course, being subject to the approval of the Montana Public Service Commission. In the case of Rocky Mountain Power Co., this approval would be had upon the approval of the proposed contract between Rocky Mountain Power Co. and Montana Power Co. as already explained. In the absence of any possible such excess above fair return, it would therefore seem appropriate, as stated, that provision for amortization should thus be made from year to year in lieu of the amortization contemplated in the act and the regulations from excess earnings after the twentieth year.

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[1] This was later determined not to be legally enforcible.

By this method assurance is had that the amortization fund will actually amortize the whole investment cost, and make possible the turning over of the project as a going concern at the end of the lease to the Government for the benefit of the Indians. The annual charge necessary to accomplish this is only 0.6 per cent—$45,324 for the Rocky Mountain Power Co. and $52,871 for Wheeler. This is on the assumption that the amortization fund will be invested annually at 4½ per cent or better.

It may be suggested that the commission may determine that 2 per cent for depreciation and obsolescence is too high a rate. In such case the reduction for same might be applied toward this proposed charge for amortization, and thus bring the sum of the two charges approximately to the amounts suggested by the applicants themselves. In Wheeler's case, as already explained, his figures can be reduced. In any way that the Secretary and the commission may determine, it is to be hoped that provision will be separately made for this amortization fund.

(7) *Fair return and excess earnings.*—A return of 8 per cent upon Rocky Mountain Power's development estimate is $635,800. The applicant divides this into bond interest at 5⅓ per cent, $423,867, and net 2⅔ per cent, $211,933, in accordance with the usual practice of total earnings being one and one-half times bond interest. Mr. Wheeler has made a different kind of set-up. He calculates interest at 6 per cent upon his development estimate, $528,709.80, and finds a net surplus of $267,278, which is 3.03 per cent additional, making a total of $795,987.80. Under regulation and limitation to 8 per cent return this total would be reduced to $704,946.40.

It need hardly be stated that so long as either applicant remains within the limits of an 8 per cent return and issues securities under the regulation of the commission only for value, it may make any division between bonds, preferred stock and common stock that it may find to be to its advantage in facilitating its financing.

(8) *Annual estimated generating cost per horsepower-year, including 8 per cent* return at Flathead (this is before including Indian rental): Assembling the above annual operating charges, and using the average capacity outputs of prime power, we have:

Estimated annual revenue or generating cost including 8 per cent return

	Annual charge		Capacity in horsepower	Cost		
	Per cent	Amount		Per horsepower-year	Per kilowatt-year	Per kilowatt-hour (mills)
Rocky Mountain Power Co.:						
Estimated	13.6	$1,079,840.00	68,000	$15.88	$21.17	2.42
Adjusted	14.3	1,077,804.00	80,500	13.39	17.85	2.04
Wheeler:						
Estimate (includes 9.03 per cent return and based on 6,000 cubic feet water)	16.53	1,456,875.00	105,000	13.87	18.49	2.11
Adjusted to 8 per cent return and based on 6,000 cubic feet water	15.19	1,330,386.00	105,000	12.67	16.89	1.93
Adjusted to 8 per cent return and based on 5,440 cubic feet water	15.10	1,330,386.00	95,000	14.00	18.67	2.13

Against this for comparison is here inserted the actual for Montana Power Co. for the year 1926. (See also below.)

Annual revenue from generating 1,375,208,770 kilowatt-hours, i. e., cost including 13.84 per cent return

Montana Power Co. system (including 13.84 per cent return):

Per cent	19. 23
Amount	$5, 325, 640
Actual horsepower generated	209, 316
Per horsepower	$25. 44
Per kilowatt	$33. 92
Per kilowatt-hour	3. 873

MONTANA POWER CO. SYSTEM

We now turn to the analysis of these Montana Power Co. costs, with a view to their guidance in helping to determine the proper basis of Indian rental.

Montana Power Co. system, year 1926.—The year 1926 is used for analysis. The reason is as follows: Toward the close of the hearings it was remembered that in March, 1928, responding to call from Mr. W. V. King, Chief accountant, the commission had received from the Montana Power Co. copies of the latter's reports to the Montana Public Service Commission for 1923, 1924, 1925, 1926, and 1927. The 1927 report was in somewhat different form than the others. Mr. King had then made from these reports a careful study of the costs for 1924, 1925, and 1926 of generating, transmission, and distribution per kilowatt-hour generated and kilowatt-hour sold. He had not determined these costs for 1927. In this study elimination had been made of all nonelectric or nonutility revenues and costs. The Indian Bureau exhibits presented at the hearings used these 1926 calculations, as there was not time to develop the figures for 1927, and 1928 data were not available. The year 1926 was therefore not "selected because it was a good year," as suggested in the Rocky Mountain Co.'s brief. (See also hearings, pp. 2279, 2280.) In fact, the year 1928 would probably make an even better showing. Then the company had 103 per cent utilization factor as against 96 per cent in 1926; its gross revenues from operation (see Wheeler Exhibit 1) were $10,489,777 as against $8,635,755 in 1926; and its net return from operation was $6,877,138 as against $5,439,034 in 1926.

The figures relating to the Montana Power Co. follow:

Installation: 1928-29—327,750 horsepower; 245,000 kilowatts (see Wheeler Exhibit 17 and Major Butler's report); 1930 will be 387,750 horsepower, 290,000 kilowatts.

Average output capacity of prime power: 1928-29—233,700 horsepower, 175,300 kilowatts; 1926—217,467 horsepower, 163,100 kilowatts (see Major Butler's report); 1930 will be 268,400 horsepower, 201,300 kilowatts.

Kilowatt-hours generated: 1926—1,375,308,770 kilowatt-hours (company report); 1927—1,362,157,457 kilowatt-hours (company report); 1928—1,584,078,104 kilowatt-hours (hearings, p. 1445).

Kilowatt-hours sold: 1926—1,165,227,847 (Indian Exhibit 3), average price realized 7.41122 mills; 1927—1,171,162,327 (company report), average price realized 7.55506 mills; 1928—1,500,000,000 approximate (hearings p. 1477), average price realized 7.20 mills.

Maximum demand factor: Maximum load for 15 minutes, 1926, 83 per cent; maximum capacity of system, 1927, 78 per cent. (Company reports.)

Load factor: Total kilowatt-hours generated in year 1926, 83 per cent; maximum load in kilowatts for 15 minutes by 8,760 kilowatt-hours, 1927, 81.4 per cent. (Company reports.)

"Plant values" (see Indian Exhibit 3 taken from company's statement to Federal Power Commission).

Plant values

	1926	Per cent	1927
Generating plants	$27,626,333.37	60.4	$28,574,074.21
Transmission and transportation	6,934,635.06	15.2	7,014,046.96
Other electric	5,702,214.65	12.5	5,964,408.28
Nonelectric	5,483,415.29	11.9	5,399,514.77
	45,746,508.36	100.0	46,952,039.20
Water rights, contracts, franchises, etc.	51,491,459.56		51,699,423.37
Total	97,237,967.92		98,651,462.57

These figures were built up by Mr. Hogenah, of Chicago, appraisal engineer, December 31, 1922, and book-cost additions have been added thereafter, as an "appraisal of physical property *determined* (italic supplied) as of December 31, 1913, plus additions to property from December 31, 1913, to December 31, 1922." Does this language mean that the *appraisal* was determined December 31, 1913, or that the *property* was determined historically as of December 31, 1913, plus additions to December 31, 1922, and then the property so determined was appraised as of December 31, 1922? Mr. Kelly, the company's attorney, took the former view very positively, but from the testimony of Mr. Cochrane, the company's chief engineer, it is clear that he considered the appraisal values as applying to December 31, 1922. Mr. Hogenah had been employed in 1913 and again in 1922 to make depreciation studies, and it would appear that he made a a fresh start on the valuations as of December 31, 1922. But how interpret the above language? In order to throw as much light as possible on this moot point, we submit the discussion which took place on the last day of the hearings (pp. 2247-2250):

> Mr. SCATTERGOOD. Now, just for the purpose of explanation to the commission, that first set of figures, namely, tangibles, were calculated on the basis, were they not, of an engineer's report by Mr. Hogenah? That was made as of December 31, 1922, and thereafter book values of actual additions to property were added from year to year. Isn't that the way it was calculated?
>
> Mr. COCHRANE. That is my understanding.
>
> Mr. SCATTERGOOD. So that as a matter of fact, these first tangible figures represent that engineer's idea—and he was also your own engineer—of the real value of tangible property?
>
> Mr. COCHRANE. Yes.
>
> Mr. SCATTERGOOD. And the other items—water rights, contracts, franchises, etc.—were what you might call intangibles?
>
> Mr. COCHRANE. Yes.
>
> Mr. SCATTERGOOD. In other words, what those whole figures total for 1927, which is fifty-one millions and upward, really represents what is customarily called "water," doesn't it?
>
> Mr. COCHRANE. I think somebody suggested that a column might be put for that water. But I don't think as a matter of fact that it is all water.
>
> Mr. SCATTERGOOD. I don't suppose it is. I have no doubt that if you were asked to set a value (a "fair value") on it, you would maintain that you had a going-concern value and various other considerations that would have to be included, such as good will, that would be properly includible in the item of these intangibles, would you not?
>
> Mr. COCHRANE. Yes.

Mr. SCATTERGOOD. So that that ("fair value"), as I understand, has never been determined—what is a fair value of the property?

Mr. COCHRANE. No.

Mr. SCATTERGOOD. Now, these represent the average 1922 reconstruction cost values plus actual investments afterwards?

Mr. COCHRANE. Yes.

Mr. SCATTERGOOD. Now, the prices prevailing about the end of 1922 were not quite the peak of the postwar prices, were they? They were a little under the peak?

Mr. COCHRANE. You mean that they had gone down a little by that time?

Mr. SCATTERGOOD. Yes.

Mr. COCHRANE. I think so

Mr. SCATTERGOOD. But still they were fairly near the peak of 1921, were they not?

Mr. COCHRANE. I presume so.

Mr. SCATTERGOOD. So that those values that are given as of that date are probably outside of what would be a real reconstruction cost less depreciation to-day?

Mr. COCHRANE. Yes.

At this point Mr. Kelly, the company's attorney, called attention to a footnote on the engineer's valuation reading "Represents appraisal of physical property determined as of December 31, 1913, plus additions to property from December 31, 1913, to December 31, 1922." He then said:

Mr. KELLY. So that the original appraisals were made upon a basis of property values as of December, 1913, and not 1922; so that the question is misleading. The exhibit does not show that and it is not a fact.

Mr. SCATTERGOOD. Well, of course, in 1913 you did not have all of your plants built.

Mr. KELLY. No. This figure represents the 1913 valuation of such plants as were then built, plus the actual cost of such plants as were built since then, many of which were built before the war prices—the plants that were built between 1913 and 1918.

The status as to plants is as follows (see p. 1472 et seq. and Major Butler's report):

Montana Power Co.'s plants, 1929

Plant	Built	Maximum		Average		Capacity factor
		Kilowatts	Horsepower	Kilowatts	Horsepower	
Black Eagle	1927	18,000	24,000	15,200	20,300	0.84
Canyon Ferry		7,500	10,000	5,600	7,500	.75
Hauser Lake	1918	18,000	24,000	14,500	19,300	.80
Holter	1918	50,000	67,000	25,500	34,000	.51
Madison		9,000	12,000	8,500	11,300	.95
Mystic Lake		11,300	15,750	6,500	8,666	.58
Rainbow	1910 1916	36,000	48,000	30,500	40,667	.85
Thompson Falls	1916	35,000	47,000	22,000	29,300	.63
Volta	1916	60,000	80,000	47,000	62,667	.78
Total, 1929		245,000	327,750	175,300	233,700	.72
Maroney (now building)		45,000	60,000	26,000	34,700	.58
Total, 1930		290,000	387,750	201,300	268,400	.69

From this table it is evident that the larger plants have been built during or since the war. Allowing half of Rainbow to pre-war and half during the war, it is seen that about two-thirds of the capacity dates during or since the war.

Some light is also furnished by Mr. Kerr's and Mr. Cochrane's answers on pages 1153 and 1193–1194 in regard to basis of valuations. Mr. Kerr and Mr. Cochrane had testified, respectively, that in round figures the installation cost of the Montana power system and of the Flathead would be about $100 per horsepower.

Mr. SCATTERGOOD. Did you use the same general scheme of valuation?
Mr. KERR. I would say so; yes.
Mr. SCATTERGOOD. Present-day reproduction costs?
Mr. KERR. Yes.

It was later shown by Mr. Cochrane that in the company's set-up of 68,000 horsepower and $7,947,500 development cost of Flathead, the installation cost per horsepower would be $116.87, not $100, as Mr. Kerr had roughly calculated it. Also it has been shown that the system's installation cost on their own figures of valuation for 1927 was $121.41 per horsepower. Inasmuch, therefore, as Mr. Kerr said that on a present-day reproduction cost basis the cost would be $100 horsepower, it is evident that the company's valuation figures of 1927 used above can not be less than reproduction cost figures of present day, as Mr. Kelly's interpretation would seem to indicate.

Whatever the proper interpretation of these figures may be, it can at least be said that they form the company's own statement of values as made to the Federal Power Commission. They are the only valuation figures in the record except the assessed valuation for taxation of all the property (electric and nonelectric) at $52,000,000 (see p. 1683). There has never been a rate case, nor has any "fair valuation" ever been placed upon this company either by the Federal Power Commission or the Montana Public Service Commission.

In the use of the word "return" as applied to the Montana Power Co., it will therefore be understood that the return is calculated upon the company's own figures, as above set forth. It is to be noted also that these valuations of the company certainly can not be less than the basis of actual investment provided in the Federal water power act, and they may and probably are much higher than said basis.

Investment cost.—Using the above generating plants figures of 1927 and the 1928 capacity figures, we have as the unit cost of development of the whole Montana Power Co.'s system: $121.41 per horsepower; $161.88 per kilowatt.

Actual generating revenue or generating cost including return and excess for year 1926

	Per cent on company valuation	Cost per kilowatt-hours generated	Amount	
		Mills		
Operating expenses	1.39	0.280	$384,566.83	
Overhead expenses (apportioned)	.44	.097	132,701.86	
All taxes, insurance, etc. (apportioned)	2.81	.564	776,868.04	
Depreciation, obsolescence	.75	.150	206,045.00	$1,500,181.73
Return at—				
8 per cent	13.84	1.607	2,210,106.64	3,825,459.00
5.84 per cent excess		1.175	1,615,352.36	
Total	19.23	3.873		5,325,640.73

	Per horse-power-year	Per kilo-watt-year	Per kilo-watt-hour
			Mills
Generating cost, including—			
Return, at 8 per cent	$17.72	$23.63	2.698
Excess, at 5.84 per cent	7.72	10.29	1.175
Total	25.44	33.92	3.873

The basis for the above figures is found in Mr King's figures as set out in Indian Exhibit 3. He therein included the items general and undistributed expenses, totaling $466,335.58, entirely in "Distributing and all other costs." As this applies pro rata to generating and transmission costs, it is subdivided and prorated as follows:

Generating	60. 4 per cent	$410, 841. 65
Transmission	15. 2 per cent	
Distribution, etc	12. 5 per cent	
Nonelectric	11. 9 per cent	55, 493. 93
Total	[1] 100. 0 per cent	466, 335. 58

This $410,841.65 for electric property is further subdivided in proportion to direct expenses as follows:

		Per ct.	
Generating	$384, 566. 82	32. 3	$132, 701. 85
Transmission	237, 869. 02	19. 9	81, 757. 49
Distribution, etc	567, 801. 48	47. 8	196, 382. 31
Total	1, 190, 237. 32	100. 0	410, 841. 65

We then have adjusted costs for 1926 as follows:

Generating:	
Operating expenses (direct)	$384, 566. 82
General and undistributed (prorated)	132, 701. 85
Depreciation actually charged (prorated)	206, 045. 00
All taxes (prorated)	776, 868. 06
Total	1, 500, 181. 73
Transmission:	
Operating expenses (direct)	237, 869. 02
General and undistributed (prorated)	81, 757. 49
Depreciation actually charged (prorated)	65, 065. 00
All taxes (prorated)	194, 999. 52
Total	579, 691. 03
Distribution and other costs (electric operations):	
Distributing, commercial, consumption	567, 801. 48
General and undistributed (prorated)	196, 382. 31
Depreciation actually charged (prorated)	54, 845. 00
All taxes (prorated)	160, 382. 93
Total	979, 411. 72

To divide return and excess between the three divisions, we proceed:

Income from electric operations, 1926 (from company report)		$8, 635, 755. 33
Expenses as above:		
Generating	$1, 500, 181. 73	
Transmission	579, 691. 03	
Distribution, etc	979, 411. 72	
		3, 059, 284. 48
Return, 8 per cent	3, 221, 054. 64	
Excess, 5.84 per cent	2, 355, 416. 21	
		5, 576, 470. 85

This shows that return and excess together are 64.6 per cent of gross revenue.

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[1] In proportion to plant values, as per company statement.

This return and excess is then distributed in proportion to investments in plant values (electric only) as per company's statement, as follows:

Generating, 68.6 per cent:		
8 per cent return	$2,210,106.64	
5.84 per cent excess	1,615,352.36	
		$3,825,459.00
Transmission, 17.2 per cent:		
8 per cent return	554,770.80	
5.84 per cent excess	404,382.19	
		959,152.99
Distribution, 14.2 per cent:		
8 per cent return	456,177.20	
5.84 per cent excess	335,681.66	
		791,858.86
Total		5,576,470.85

Assembling the direct costs and the return and excess distributed, we then finally have:

Cost and profit of Montana Power Co. System, 1926

			Generated			Sold		
			Per kilowatt-hour	Per horsepower	Per kilowatt	Per kilowatt-hour	Per horsepower	Per kilowatt
Generating:			*Mills*			*Mills*		
Operating expenses	$384,586.82		0.280			0.330		
General expenses	132,701.86		.097			.114		
Depreciation actually charged	206,045.00		.150			.177		
All taxes	776,958.05		.564	$17.72	$23.63	.666	$20.92	$27.89
		$1,500,151.73	1.091			1.287		
Return 8 per cent	2,210,108.64		1.607			1.897		
Excess 5.84 per cent	1,615,352.36		1.175	7.73	10.39	1.387	9.11	12.15
		3,825,489.00						
		5,325,640.73	3.873	25.44	33.93	4.571	¹30.03	40.04
Transmission:								
Operating expenses	237,898.08					.204		
General expenses	81,757.40					.070		
Depreciation actually charged	65,084.00					.056		
All taxes	194,958.52					.167	4.39	8.52
		579,681.08				.497		
Return 8 per cent	554,770.80					.476		
Excess 5.84 per cent	404,352.19					.347	2.28	3.04
		959,122.99				1.320	¹6.67	11.56
		1,538,844.02						
Distribution, etc.:								
Distributing, etc	567,501.46					.487		
General expenses	196,262.11					.169		
Depreciation actually charged	54,845.00					.047		
All taxes	160,302.96					.138	8.06	10.79
		979,411.72				.841		
Return 8 per cent	456,177.30					.391		
Excess 5.84 per cent	335,681.56					.288	1.90	2.52
		791,858.86				1.520		13.31
		1,771,270.58					¹9.96	
Gross revenue from operations		8,635,755.33				7.411	¹46.66	64.91

¹ These figures vary from Indian Exhibit No. 6 because of the distribution of general expenses and because of including here $27,866.42 miscellaneous earnings from operation which had been erroneously omitted.

From the above table it will be seen that in 1926 the earnings of the company showed per horsepower sold:

	Per horsepower-year	Mills per kilowatt-hour
Cost, including 8 per cent return	$35.40	5.39
Excess of 5.84 per cent	13.28	2.02
Gross	48.68	7.41

It also shows:

Actual direct cost on current sold

	Mills per kilowatt-hour	Per horsepower	Per kilowatt-
Generating cost	1.287	$8.45	$11.27
Transmission cost	.497	3.26	4.35
Distribution and other	.841	5.63	7.37
Total	2.625	17.34	22.99
And—			
8 per cent return	2.764	18.16	24.21
5.84 per cent excess	2.022	13.28	17.71
Total	4.786	31.44	41.92
Grand total	7.411	48.68	64.91

In other words, $31.44 out of $48.68 per horsepower-year is return including excess or 64.6 per cent, i. e. of every dollar in gross revenue, 64.8 cents is return on the company's own valuation basis.

In passing it is of general interest to note:

(1) Here is a public utility hydro power company with a remarkably low average selling price of its power. In 1926 it was 7.411 mills per killowatt-hour sold, i. e. $48.68 per horsepower-year. In 1928 it was 7.2 mills per killowatt-hour sold, i. e., $47.36 per horsepower-year. Mr. Kerr, its vice president, probably is well advised in his claim that it has the lowest general average selling price of any power company in the United States. He claims it is half a cent less in average selling price than the much discussed Province of Ontario Government project.

(2) Its prices to its special large load customers are very low indeed. To its largest customer it sells at $25 per horsepower-year with a sliding scale reducing this price even lower when certain metal prices go down. Also, its general prices to small customers throughout Montana are claimed to be uniform throughout the State, and to compare very favorably with such prices generally charged elsewhere by power companies.

(3) Yet in spite of these prices which compare so favorably with the rates for electricity generally charged throughout the United States, this company has been able to make current so cheaply through the natural advantages of its water-power sites that it actually earned 13.84 per cent in 1926 (taken as a sample year) upon its own valuation of about $41,350,000 for its tangible property.

(4) These earnings have supported and paid returns upon a securities structure of bonds and stock totalling about twice the value of all of its tangible property. Its own valuation of its intangibles, consisting of "water rights, contracts, franchises, etc.," was about $51,500,000.

(5) The valuation upon which this return is calculated is, as stated, the company's own valuation of its tangibles. As already pointed out, it is not entirely clear from the testimony just what the basis of values is. Assuming on the one hand that it represents the appraised value as of December 31, 1913, plus actual investments made since that date, then the tangibles approximate the basis of valuation provided for in the Federal water power act. If, on the other hand, it represents appraised values of the property December 31, 1922, plus actual investments made since then, it would represent approximately "present-day reproduction-cost values."

The so-called "fair value" fixed as a rate base by a commission in a rate case would probably be somewhere between these two ways of estimating values.

(6) No rate case has ever been brought to test this company's rates and no "fair value" basis of valuation has ever been established. Such reductions in rates as have been made have been made voluntarily by the company itself.

(7) It is apparent from the above figures that further rate reductions averaging $13.28 per horsepower-year, or 2.02 mills per kilowatt-hour—i. e., about 27 per cent—could be made and still the rates would provide to the company an allowed return of 8 per cent upon its own valuations of its tangible property.

(8) The Flathead site No. 1 reveals $4.33 lower generating cost per horsepower-year, including 8 per cent return, than the Montana Power Co. system generating cost in 1926, also including an 8 per cent return; and this does not include $7.22 per horsepower generated excess earnings actually made.

(9) In the face of these figures it is apparent that the $1 per horsepower-year offered by the company for Indian rental is far from proper compensation based on the value of the site. This will be referred to further.

(10) With regard to regulation, the jurisdiction of the Federal Power Commission and of the Secretary of the Interior in this case do not extend beyond the applicants. The Montana Power Co. is subject, as already stated, only to the jurisdiction of the Montana Public Service Commission. It would seem all the more important, therefore, that full powers of regulation be exercised by the Federal Power Commission upon the licensee, whether Rocky Mountain Power Co. or Wheeler.

IV. Intercompany Price

In the case of applicant Wheeler, this subject has no bearing because he sets up only one company, and fixes his output price wholesale at $15 per horsepower. He did quote, however, a price of 2½ mills, which is $16.34 per horsepower-year, to H. M. Byllesby & Co.'s Mountain States Power Co. at Kalispell, Mont., and found this price would interest them. Mr. Kerr, when asked, said this was a very favorable price, if there were no maximum demand.

In the case of applicant Rocky Mountain Co., the applicant's set-up in Exhibit 8 was based on $18 per horsepower-year, which is 2.75 mills per kilowatt-hour wholesale price at bus bar. See also Rocky Mountain brief, page 6, where the explanation is made "Total cost (and proposed selling price) per horsepower sold, $18." Also see pages 1333–1334.

Further references to intercompany prices in the record are also cited as follows:

(1) Mr. Kerr told the story of the pick-up bargain rate of $10 per horsepower-year, or 1.52 mills per kilowatt-hour prevailing for a time from the Washington Water Power Co. to the Intermountain Power Co., not a criterion for present day conditions (p. 1192); also of a rate prevailing between a Stone & Webster Co. further west of $16 per horsepower for 10,000 horsepower, plus three-fourths mill per kilowatt-hour for high-water months and 2½ mills for low-water months, which figured out is $21 per horsepower-year, or 3.20 mills per kilowatt-hour.

(2) The price between Washington Water Power Co. and Montana Power Co. now prevailing when power is exchanged is 3 mills per kilowatt-hour (p. 1190). This is, according to Mr. Kerr, "so-called 'dump power' furnished when and as they have it, with nothing to bind them to furnish it." When asked, if it were primary power whether it would be an even higher price, he replied "Oh, yes; no doubt."

(3) Mr. Cochrane stated that if the Wheeler plan of selling only to large consumers were changed, and he developed a plan similar to that of the Rocky Mountain Power Co. and offered a price comparable to it, the Montana Power Co. might do business with him (p. 1402).

(4) Before the consolidation of its subsidiary operating companies with the Montana Power Co., the intercompany price for power exchanged was 5 mills or $32.84 per horsepower-year (p. 2091).

(5) Finally, as to the suggested price for power between Rocky Mountain Power Co. and Montana Power Co., the record on pages 2290 to 2292 is as follows:

> Mr. Scattergood. What would be the right price, do you think, for the Rocky Mountain Power Co., if its entity were continued, to charge to the Montana Power Co.?
>
> Mr. Kerr. I can't say any figure. I can't make an offhand guess at a figure, because I told you here the other day that I didn't know what the final cost would be; but I can tell you what is a common price, one that is offered by the Government, for instance, at Boulder Dam, 3 mills (or $19.60 per horsepower); and in make dump power, so-called dump-power contracts where we charge 2½ mills (or $16.34 per horsepower) and 2 mills (or $13.07 per horsepower).
>
> Mr. Scattergood. Would you feel that the commission would be well advised if it used that price of 3 mills as a price between the two companies at the bus bar?
>
> Mr. Kerr. If you charge 3 mills to the other company, I say that is all right, if it would give a proper return. It would have to be a proper return. You are asking generally what these kinds of prices are. I have told you.
>
> Mr. Scattergood. That is what I want, because it would go into the whole picture.
>
> Mr. Kerr. And I want to emphasize that the Montana Power Co.'s 5-mill price was simply a convenient figure. It is easy to multiply by 5, and it don't make a bit of difference in the final answer.
>
> Mr. Scattergood. Of course if you did offer the Montana Power Co. wholesale current at Flathead at 3 mills, you (the Montana Power Co.) would have to put on the additional transmission cost and your interest on your transmission machinery, and all your other charges, wouldn't you?
>
> Mr. Kerr. Yes, sir.
>
> Mr. Scattergood. But that would be a fair price that you think could——
>
> Mr. Kerr. That is one of the prices that is around in the neighborhood that might be sold.

For purposes of easy comparison, the following conversion table is submitted:

Conversion table

Per kilowatt-hour	Horsepower year (at 6535 mills)	Kilowatt year	Per kilowatt-hour	Horsepower year (at 6535 mills)	Kilowatt year
2 mills	$13.07	$17.52	2.85 mills	$18.62	$24.97
2.10 mills	13.72	18.40	2.90 mills	18.95	25.40
2.20 mills	14.38	19.27	2.95 mills	19.28	25.84
2.25 mills	14.70	19.71	3 mills	19.60	26.28
2.30 mills	15.03	20.15	4 mills	26.14	35.04
2.35 mills	15.36	20.59	5 mills	32.68	43.80
2.40 mills	15.68	21.02	6 mills	39.21	52.56
2.45 mills	16.01	21.46	7 mills	45.74	61.32
2.50 mills	16.34	21.90	8 mills	52.28	70.08
2.55 mills	16.66	22.34	9 mills	58.81	78.84
2.60 mills	16.99	22.78	1 cent	65.35	87.60
2.65 mills	17.32	23.22	5 cents	326.75	438.00
2.70 mills	17.64	23.65	8 cents	522.80	700.80
2.75 mills	17.97	24.09	10 cents	653.50	876.00
2.80 mills	18.30	24.53			

V. THOMPSON FALLS AND ITS SAVINGS TO MONTANA POWER CO. IF FLATHEAD POWER SITE NO. 1 IS DEVELOPED

One further feature remains to be considered. This is the benefit which will automatically accrue to the Thompson Falls plant of the Montana Power Co., located as it is down the Flathead River on Clarks Fork of the Columbia River, and which will be caused by the regulation of flow through the increased storage at Flathead. This increase of power at Thompson Falls will accrue whether the Rocky Mountain Power Co. or Wheeler is the developer of the Flathead site No. 1.

There was considerable reference in the hearings to Thompson Falls. Suffice it here to say that the Montana Power Co. itself admitted an estimated increase of 10,000 horsepower distributed over eight months of the year (pp. 1502, 1625), making about 66,000,000 kilowatt-hours additional (p. 1638). This is based on an increased flow of 2,600 cubic feet per second due to Flathead storage (p. 1626) and an average head of 50 feet and 70 per cent efficiency (pp. 1640, 1708). Taking the 1926 basis of sale and net return as already calculated, we have 66,000,000 kilowatt-hours by 7.411 mills, equals $488,400; and 64.8 per cent for return including excess shows $316,483 additional profit from Thompson Falls. This is on the admitted assumption that no additional transmission lines would have to be built (p. 2065), although if this added load were to be constantly transmitted east, it would be an economy to build an additional line to supplement the Milwaukee Railroad transmission line now used. If this extra Thompson Falls current were sold to the west to Washington Power Co. at 3 mills (p. 207), it would lower the average price used above.

At the hearings the increased amount shown to be available at Thompson Falls because of Flathead storage was conservatively calculated as only 43,000,000 kilowatt-hours additional, showing net gains of $193,000.

Based on the 1928 generated output of 1,584,000,000 kilowatt-hours this increase of 66,000,000 kilowatt-hours at Thompson Falls is an increase of more than 4.1 per cent for the whole system. Using again the 1926 cost figures and adding the $316,483 added profit to the system shows the following:

Generating cost, 1926

	Mills per kilowatt-hour	Per horsepower	Per kilowatt
Montana Power Co. system: 8 per cent return	2.698	$17.72	$23.63
5.84 per cent excess	1.175	7.72	10.29
Total, 13.84 per cent	3.873	25.44	33.92
Montana Power Co. system with Thompson Falls added production because of Flathead storage:			
8 per cent return	2.698	17.72	23.63
6.99 per cent excess	1.340	8.80	11.73
Total, 14.99 per cent	4.038	26.52	35.36

Thus Thompson Falls's increase because of Flathead storage would add $1.08 per horsepower-year to the Montana Power Co.'s system on the basis of the 1926 figures and would increase the return, including excess, to 14.99 per cent. Presumably this would be available for rate reductions to consumers. (See p. 1542.) It is not claimed here as available for the Indian rental, but, as will shortly be shown, it is an element that must enter into the calculation of the interests of the general public and of the irrigation project in particular.

VI. Indian Rental

We are now in position to assemble the elements already considered and to develop what they reveal to be available for (1) the company's return, (2) Indian rental, (3) general consumers, and (4) the special consumers in the irrigation projects. In order that full justice be done to the Indians, it is proposed here to consider the case first as if there were only the first three parties and no irrigation project, and thus to fix the proper intercompany price for the pro forma calculation of the Indian rental; then secondly to make such slight modification in said intercompany price as may be necessary to provide under existing conditions the reservation by the United States for the irrigation project of 15,000 horsepower at the prices agreed upon in advance by one of the applicants.

If the license is given to applicant Wheeler, and if the lake regulation permitted 6,000 cubic feet per second of water, as he estimated, there would then be a margin of $2.33 per horsepower-year between his price to consumers of $15 and his cost as adjusted to an 8 per cent return and 0.6 per cent amortization charge, of $12.67. Out of this the Indians and the irrigation project would have to be provided for. If, however, only 5,440 cubic feet per second of water is allowed in the lake regulation, Wheeler's prime power capacity will be reduced to 95,000 horsepower, and his cost will be increased to $14 per horsepower. There would then be a margin of only $1 per horsepower-year between his price to consumers of $15 and this $14 cost. Manifestly, so far as Indian rental goes, Wheeler's proposition of selling power at $15 per horsepower can not compare with applicant Rocky Mountain Power Co.'s intercompany price of $18 in advantage to the Indians. Furthermore, it is to be remembered, as already shown, that applicant Wheeler's high cost of financing and overhead and his high operating estimates penalize him about $1.70 per horsepower-year when compared with the other applicant on the same basis of capacity, and which would otherwise be available at least in part for Indian rental.

If the license is given to Rocky Mountain Power Co., we have the following assembled elements:

Average annual generating cost

	Per horsepower year	Per kilowatt-hour (mills)
Rocky Mountain Power Co.'s estimate, at 8 per cent return excluding rentals	$15.88	2.42
Rocky Mountain Power Co.'s estimate as adjusted, at 8 per cent return, excluding rentals	13.39	2.04
Rocky Mountain Power Co.'s estimate, at 8 per cent return, including Indian rentals	16.88	2.57
Montana Power Co. system, 1926:		
8 per cent return	17.72	2.698
5.84 per cent excess	7.72	1.175
Total, 13.84 per cent	25.44	3.873
Montana Power Co. system, 1926, with Thompson Falls additional power added:		
8 per cent return	17.72	2.698
6.99 per cent excess	8.80	1.340
Total, 14.99 per cent	26.52	4.038

From the above it is to be seen that—

The adjusted estimated average generating cost for 80,500 horsepower including 8 per cent return at Flathead ($13.39 per horsepower) is:

(1) $2.49 per horsepower less than applicant's own estimate of $15.88 at 8 per cent return and excluding rentals, for 68,000 horsepower.

(2) $4.49 per horsepower less than applicant's own estimate of $17.88 (round figures $18) at 8 per cent return and including Indian rental and irrigation cost, at 68,000 horsepower.

(3) $4.33 per horsepower less than Montana Power Co.'s system generating cost of 1926 at 8 per cent return.

(4) $12.05 per horsepower less than Montana Power Co.'s system generating cost of 1926 at actual return and excess.

(5) $13.13 per horsepower less than Montana Power Co.'s system generating cost of 1926 with Thompson Falls additional power due to Flathead storage added at actual return and excess.

As already pointed out, the difference between the intercompany wholesale price and the annual average generating cost represents the economic rental value of the site and this should be divided between the Indians as a tribe and the general public interests (of which of course the Indians as individuals also form a part) in fair proportion. In other words, the Indians have the ownership of the five sites and of that portion of the Flathead Lake that lies within the reservation, while the State of Montana owns the remainder of Flathead Lake and the right to control the use of the waters in the lake and river over and above the prior rights of the Indians. Thus both the Indians and the general public have rightful interests in the

Flathead power development. Hence it would seem fair that whatever economic rental value this site has should be divided either approximately half to the Indians as a tribe and half to the public, or if it is really possible to determine their respective interests more exactly, that this rental value should be apportioned pro rata between them. In this connection it may be said that there are now being made in the Federal Power Commission and in the General Land Office studies of the Indian tribal lands and of Indian allotment lands, and that these seem to indicate that the Indian interests in the power development are 46.5 per cent and the non-Indian interests 53.5 per cent. However, as these studies appear to be somewhat tentative and perhaps open to certain legal uncertainties relating to the easements upon lands bordering on the lake, it seems best for the purposes of this memorandum to assume 50 per cent of the economic rental value of the site as belonging to the Flathead Indians as a tribe, and the other 50 per cent as belonging to the general public of the State of Montana. It is perhaps superfluous to add that the Indian rental will be paid to the Federal Government in trust for the Indians, and the public's interest will be under the care and protection of the Montana Public Service Commission in its regulation of the Rocky Mountain Power Co. and the Montana Power Co.

Applying the above, we have:

	Per horsepower	Round figures
Intercompany price as fixed by applicant	$17.88	$18.00
Average annual generating cost at Flathead	13.39	13.39
	4.49	4.61

One-half for Indians would equal, say, $2.25 per horsepower as the proper rental, as calculated from an annual average of 80,500 per horsepower.

Another slightly more conservative way of estimating the economic rental value of Flathead site No. 1 would be to use as our intercompany wholesale price the average annual generating cost including the same basis of 8 per cent return of the Montana Power Co. system.

Thus we have:

	Per horse-power
Intercompany price, using cost of Montana Power Co. system	$17.72
Average annual generating cost at Flathead	13.39
	4.33

One-half for Indians would equal $2.16½ per horsepower as the proper rental, as calculated from an annual average of 80,500 horsepower.

Using the mean of these two calculations, we have $2.21 per horsepower as a fair rental for the Indians.

If we take $2.21 per horsepower as Indian rental we have $15.60 per horsepower, i. e., 2.387 mills per kilowatt-hour as the adjusted average generating cost, including 8 per cent return and Indian rental. This price of 2.387 mills per kilowatt-hour for an intercompany price would pay to Rocky Mountain Power Co. a return of 8 per cent and provide all the operating expenses including depreciation of 2 per cent and amortization charge of 0.6 per cent, which will fully amortize the investment in 50 years, if invested at 4¼ per cent, and pay an annual rental to the Indians of $2.21 per horsepower per year. All of the public's share above referred to would under this basis through the low intercompany price be transferred from the Rocky Mountain Power Co. to the Montana Power Co. and be under regulation in that company. If, however, the higher intercompany price of 2.75 mills per kilowatt-hour, ($18 per horsepower) were utilized the public's share would remain in the Rocky Mountain Power Co., also under regulation. There would be no difference, so far as the public interest is concerned, because in the proposed license it will be required that the securities of the Rocky Mountain Power Co. shall be regulated by the Federal Power Commission and that no bonus stock will be possible, and that all the equity-carrying common stock of the Rocky Mountain Power Co. shall be owned and be retained by the Montana Power Co. This will make possible complete regulation.

As has been shown the Indian rental for Flathead site No. 1 is obtainable only from the licensee, Rocky Mountain Power Co., and to the amount of one-half of the advantage of this site over the average of the Montana Power Co.'s system. However, the other one-half from the Rocky Mountain Power Co. accruing to the public will be added to the existing excess of the Montana Power Co. and be available under regulation for the general consumers. Thus, combining the figures for the two companies, with such a price of 2.387 mills per killowatt-hour after paying the Rocky Mountain Power Co.'s 8 per cent return and the Indians' $2.21 per horsepower, there would still be available for the irrigation project and general consumers under regulation the following:

	Per horsepower
With 8 per cent return only	$2.18
With 8 per cent return and present excess	9.90
With 8 per cent return and excess, and including additional power at Thompson Falls due to Flathead	10.98

The above figures apply to generation alone. If the return on the whole system were limited under regulation to 8 per cent, the possible rate reductions might be still further increased, as already indicated. It is especially to be noted that the above figures, including $2.21 per horsepower to the Indians, make the estimated cost to the applicant less than its own estimated cost at Flathead by $1.88 per horsepower, or 0.288 mills per kilowatt-hour. Thus if it were to its advantage to lease Flathead under its own estimates rather than to develop another one of its smaller and less desirable sites, it remains so still even with this higher rental to the Indians.

Another opportunity to compare the low cost of current at Flathead with general costs for current, resulting in a difference in favor of an increased Indian rental, is found in the following extract from the hearings (p. 1549):

> Mr. SCATTERGOOD. There is no more virtue in that figure of a dollar to the Indians per horsepower? There is no final virtue, I would say, because you offered it?
>
> Mr. COCHRANE (chief engineer). That figure, I can explain, was a figure which was made because in our—without making any detailed estimate as to what

we could afford to pay for this particular site we said general power at a site like this may be worth $20 a horsepower. We are selling that at Great Falls and used that as a general figure without making any estimates, and that a dollar a horsepower—that is, 5 per cent of that probably would not be a ruinous figure.

Mr. Cochrane was here speaking "by the book" when he spoke of "power like this being worth $20 a horsepower at a site like this." As a matter of fact the system generating cost of current sold at their plants, including an 8 per cent return on the company's own valuation, has been shown above to have been, in 1926, $20.92; if the 5.84 per cent excess is added it was $9.11 per horsepower more, or a total of $30.03 per horsepower on all system sales.

Now if this general figure of "$20 per horsepower" is set over against the $13.39 cost conservatively estimated to be the cost, including 8 per cent return, at Flathead site No. 1, it would seem proved from Mr. Cochrane's own statement that $2.21 for the Indian rental could amply be afforded without reducing at all the company's present high basis of earnings.

Another slant on the "nominal" offer of $1 per horsepower made without regard to the site's earning power is found in its origin in the nominal charge of $1 per horsepower formerly made by the United States Forest Service, but now no longer in use.

The following developed in the hearings (p. 1549–1550):

Mr. Kerr (when Mr. Cochrane was on the stand). Mr. Cochrane did not make that price (the $1 per horsepower rental). I made that price. I will tell you how I made it. It was the forest rule.

Mr. Scattergood. But that rule is no longer in existence.

Mr. Kerr. It was at that time, and we are paying at that rate now. (He refers to some other plants of the system on forest lands.)

Mr. Scattergood. You have passed from that time, have you not?

Mr. Kerr. Yes. They predicated that rule——

Mr. Scattergood. Because it was not an adequate rule?

Mr. Kerr. That is what it was based on.

Mr. Scattergood. Thank you very much for enlightening us on that, Mr. Kerr. I thought it was not based on any calculation of the earning power of this site, because it is, of course, inadequate in that respect.

The next day the hearings proceeded (pp. 1615–1617):

Mr. Scattergood. Mr. Cochrane, you heard Mr. Kerr mention that the $1 a horsepower proposed to be paid to the Indians for rental had been taken from the scale that had been used by the Forestry Department. Do you know anything about that?

Mr. Cochrane. Well, that refreshes my memory on the subject a little bit, and I presume that that was where the figure originated, but as for our average—that is, in assuming that figure, we assumed that it was not based on detailed calculations as to how much we thought this site was worth or how much we could be forced to pay for it, or anything of that kind; it was just a fair nominal figure taken without analysis.

Mr. Scattergood. That is just what I thought it was. Now, in the matter of this Forestry scale, do you know whether that scale is still in existence in the Forestry Department?

Mr. Cochrane. I don't know for sure; no.

Mr. Scattergood. Do you know anything about it?

Mr. Cochrane. No.

Mr. Scattergood. You don't know whether I am right in the impression that I gained from the head of the Forestry Service that it no longer exists?

Mr. Cochrane. I don't know of my own knowledge; no.

Mr. Scattergood. Well, do you know whether or not, when it was in existence, it measured anything on the basis of actual values of sites, or was it, just as you say, nominal?

Mr. Cochrane. That is my impression, that it was nominal, arbitrary.

Mr. Scattergood. Would there have been any particular reason for the United States Government on public lands to charge anything but a nominal value? There would be no object in the Government doing it, would there? I mean nominal rental when I say value.

Mr. Kelly. Five per cent of the gross value of the product is hardly nominal.

Mr. Cochrane. I think perhaps "arbitrary" should be used instead of the word "nominal" in this computation.

Mr. Scattergood. What I meant to say was wouldn't it be a fact that whatever charge was made by the United States Government would have to be carried through into the rate and be loaded upon the consumers.

Mr. Cochrane. In the same way that any other charge would be; yes, sir.

Mr. Scattergood. So that in public lands and forestry cases, where there is no special ownership involved as there is in the case where Indian property is held in trust, there is no reason for the Government to make the consumer pay anything more than the real fair cost and the proper return to the company?

Mr. Cochrane. I wouldn't think there would be any object in the Government requiring the customer to pay more than a fair charge in any event.

Mr. Scattergood. That is what I think, too, and I want to just bring it out, that so far as that nominal charge is concerned, it was nominal and was not meant to in any way measure the value of the site; and as a matter of fact that scale no longer exists.

From the above tracing of the origin of the $1 offer it is apparent that the company was working on the assumption that the basis of rental for an Indian site might be the same as for forest or public lands, overlooking the distinction between the Government trust for the Indians in the first case and outright ownership by the Government in the second. The company was accustomed to paying the nominal $1 per horsepower rental for the forest lands, and apparently assumed that this would be considered sufficient for Indian lands. Admittedly as Mr. Cochrane says, the company "did not base its offer on detailed calculations as to how much we thought this site was worth."

It is this lack of "detailed calculations" as to what the site is really worth to the Government in trust for the Indians that the Indian Bureau is now attempting to supply in this memorandum, and we believe a sound basis is found to be furnished for the rate of $2.21 per horsepower in the figures above presented on the basis of 80,500 horsepower.

It may also be added that so far as the Indians are concerned from a direct financial standpoint alone, the above rental payments would lie to the advantage of the Rocky Mountain Power Co. The general consumers of the State would also profit more in possible rate reductions from the Flathead development than would be the case if the license were given to Mr. Wheeler. On the other hand, Mr. Wheeler's plans, if successful, would bring real advantages of other kinds through the introduction of new industries, new employment, new markets, etc.

MINIMUM RENTAL PAYMENTS

Another phase of Indian rental besides its rate remains to be considered.

Under Regulation 14, section 5 of the commission, it is provided that "The charge (for Indian rental) shall commence upon date license is issued."

There will necessarily be a considerable period for construction before the power will be available and earnings begin. Both applicants estimate a construction period of three years. Mr. Wheeler will take longer to get started because he has not made preliminary borings. He will also have to complete his financing and marketing plans which will take some time. He will lose 1930 low-water season. Rocky Mountain Power Co., as already pointed out, has not only made borings, but is ready to start a construction gang immediately to work, and hopes, if granted the license, to divert the Flathead River for building the foundation of the dam in the low-water season of 1930. It is also to be noted that Mr. Wheeler at this stage is applying only for a preliminary permit for all his sites, while Rocky Mountain Power Co. is applying for both preliminary permit for four sites, and license for site No. 1. Hence in Wheeler's case, rental to the Indians will be delayed; if Rocky Mountain Power Co. is given the license, a rental will begin immediately.

The basis of rental calculation and the rates for the first 20 years suggested above are upon the assumption of the actual development of the estimated prime power. The factors in the calculation are purposely conservative, and, as heretofore stated, the estimate will probably be exceeded over the 20-year period. However, a rental so calculated would clearly not be applicable to a long construction period when no income would be obtainable. Accordingly, the Indian Bureau would suggest that for said construction period, i. e., from the date of the license to the date when the first power from Flathead is sold, an arbitrary fair minimum amount be fixed in the license by the commission and the Secretary of the Interior, say at the rate of $20,000 per annum.

If the license is granted to the Rocky Mountain Power Co., another consideration must also be provided against for the proper protection of the Indians. That is to provide that the Flathead plant shall not be used any more than any of the other plants as a "peak load plant" in the Montana Power Co. system. This means that it should and must be so operated as to develop at least its pro rata share of the system annual load factor, and not be used only at peak times and "starved" at other times. It is not to be expected that the merging of the Flathead plant into the full-load factor of the system can be obtained the first year, probably not for three or four years. It would therefore seem fair to suggest that in the license it be provided that from the date when the first power from Flathead is sold, the rate of $2.21 per developed horsepower shall apply, but that the company be given time to develop its full-load factor at Flathead on the following basis of progressive minimums for the early years, viz:

First year, applicant shall operate Flathead at an annual load factor (calculated the same as for the system) of not less than 60 per cent, based on the actual peak for 15 minutes.

Second year, the same except of not less than 67½ per cent load factor.

Third year, the same except of not less than 75 per cent load factor.

Fourth year and thereafter at not less than the system load factor.

In case the load factors developed at Flathead should fall below these minimums, then rentals to be based at the $2.21 rate on the minimums, the same as if they had been reached.

If Mr. Wheeler is given the license, it would seem from his own plans that he hopes to be able to start off immediately with his load more fully developed than on the usual company basis. He should, however, be required to pay progressive minimum rentals, and after say the fourth year, be required to pay not less than 83 per cent of his full load, using there the same load factor as applies to the other applicant.

CAPITALIZED VALUE OF SITE NO. 1 BASED (1) ON INDIAN RENTALS; (2) ON MONTANA POWER CO.'S VALUATION OF "INTANGIBLES"

The full annual earning power of site No. 1 for the Indians from Mr. Wheeler would be:

(1) 105,000 × $1.12½ = $118,125 on his own basis of 6,000 cubic feet per second of water.

(2) 95,000 × $1.12½ = $106,875 on the basis of 5,440 cubic feet per second of water. Capitalizing these at 8 per cent (the return allowed the licensee) gives: (1) $1,476,562; (2) $1,335,937.

A similar calculation for Rocky Mountain Power Co. as adjusted gives: 80,500 × $2.21 = $177,905 per annum. Capitalizing this at 8 per cent (the return allowed the licensee) gives $2,223,812. It is clear that on this basis the latter applicant is better for the Indians on direct financial results.

Let us now make a further comparison with the Montana Power Co. system.

If this were a power development other than on Indian or public lands, the cost of site would be included in the prelicense cost of development allowed by the commission. For comparison let us add this to the estimated plant cost to find what the total investment cost per horsepower would be. We would have:

Estimated plant cost	$7,555,400
Site, if purchased	2,223,812
Total	9,779,212

$9,779,212 ÷ 80,500 = $121.48 per horsepower as development cost. This compares with $127.04 for the Montana Power Co. system in 1926, assuming that the company's own valuation of its generating plants at $27,626,333 includes the values of power sites. Also it is to be seen that $121.48 is very reasonable and is in fact low as compared to the great majority of power sites.

If, however, these company valuations do not include the values of the sites, then the values of the sites must be included in the company's "intangibles," which it describes as "water rights, contracts, franchises, etc." For purposes of comparison, let us now apply to the Flathead project the company's own valuation of these intangibles and so determine a figure comparable to the company's valuation set up, and find what per horsepower the site would be worth on this basis.

In the Montana Power Co. system the 1927 report shows:

Tangibles	$46,952,039 = 47.6%
Water rights, etc	51,699,423 = 52.4%
Total	98,651,462 = 100%

Assume the same proportion for Flathead.

Now the estimated plant cost at Flathead without any value for site is	$7,555,400
This is 47.6 per cent of	15,872,689
52.4 per cent of $15,872,689 is	8,317,289

We then have:

Tangible plant	$7,555,400
Intangibles, including water rights, etc., would be	8,317,289
Total value would be	15,872,689

The development cost would then be: $15,872,689 ÷ 80,500 horsepower = $197.18 per horsepower.

Using the same operating ratio of 14.3 per cent including the 8 per cent return as is used in the Rocky Mountain estimate as adjusted, we would have:

	Per horsepower
Annual generating cost, including 8 per cent return	$28.00
As compared to	13.39
Increase due to "Intangibles"	14.61

On this basis of the company's own "watered" valuations, Flathead site No. 1 would show $7.30, that is one-half of $14.61 per horsepower for the Indians instead of the proposed $2.21 per horsepower. Manifestly the company would not wish to see the Indians claim the same basis of valuation as it has used itself.

VII. THE FLATHEAD INDIAN IRRIGATION PROJECT, AND 15,000 HORSEPOWER FOR PUMPING AND OTHER USES

Early in this memorandum (p. 8) attention was called to the four interests involved in the Flathead power development, viz., (1) the company, which is entitled to its return of 8 per cent; (2) the Indian tribe, which is entitled to a fair rental for the power sites; (3) the general consuming public; (4) the special part of the public forming the irrigation project, being about 20 per cent Indian and 80 per cent white, and to whom have been promised by one of the applicants certain low rates for power up to 15,000 horsepower under certain restrictions.

Having considered the first three interests, we now turn to the fourth, the Flathead irrigation project.

Before considering the power features, however, it seems desirable at this point to insert a brief historical account of the Flathead Indian irrigation project with some comments on the water rights involved, which has been prepared by our counsel, Mr. Reeves:

HISTORY OF FLATHEAD IRRIGATION PROJECT

The Flathead Indian Reservation, Mont., embracing some 1,500,000 acres, was established in 1855 by treaty with the Confederated Flathead Tribes, being a part of the original area occupied and claimed by these Indians from time immemorial. The northern boundary of this reservation (from east to west) bisects Flathead Lake, a considerable body of navigable water some 30 miles long (north and south) by some 20 miles at its widest extremity, which is within the lower or south half of the lake and within the Indian reservation. The waters from this lake are discharged at its southern extremity into Flathead River, which traverses the reservation in a general southerly and westerly direction for a distance of some 60 miles or more. Without water for irrigation, the lands within this reservation are practically valueless for agricultural purposes and under a doctrine now well settled, the establishment of an Indian reservation, ipso facto also reserves for the Indians sufficient water for their needs for agricultural and other purposes. Of this paramount right the Indians can not be deprived by appropriation or application to beneficial use of such water by third parties. This remains true even though the application to beneficial use by third parties antedates such use of the water by the Indians themselves. As to this see Winters *v.* United States (204 U. S. 564), and Conrad Investment Co. *v.* United States (161 Fed. 829).

The reservation so established for these Indians remained practically intact until after the passage of the act of April 23, 1904. By this statute Congress directed that allotments in severalty be made to these Indians in accordance with the allotment laws of the United States and provided for the classification and disposal of the surplus or unallotted and unreserved lands for the benefit of the Indians, under the homestead, mineral, and town site laws of the United States, at not less than the appraised value of such lands.

It appearing at an early date that some 135,000 acres within this reservation could be greatly enhanced in value by irrigation, of which approximately 78,000 acres could be furnished with water by gravity and the remainder by pumping, a comprehensive irrigation plan was inaugurated, which project has since been commonly known as the Flathead Indian irrigation project. In furtherance of the plans in connection with this work something over $5,000,000, reimbursable funds appropriated by Congress have already been expended in order to supply these lands with water. With a view of giving timely warning of the intention of the Government in this matter "notices of appropriation" of the waters of Flathead River, including of course, those from Flathead Lake, were duly filed by the Reclamation Service in behalf of the United States and placed of record pursuant to the statutes of the State of Montana. Such action was first had early in the year 1909 and renewal or additional notice filed from time to time in compliance with the laws of the State down to and inclusive of the year 1927. As such notices will show, the purposes for which said water was appropriated were for the irrigation of lands within the Flathead Indian Reservation, for domestic uses, and for developing power for pumping and other purposes. In furtherance of these plans under authority of section 22 of the act of March 3, 1909 (35 Stats. L. 795), some 2,500 acres of land chiefly valuable for power-site purposes along Flathead River within the reservation, were withdrawn from sale, entry, or any other form of appropriation. The most valuable of the power sites along this river, within the Indian reservation, commonly referred to as site No. 1, lies 4 miles below where Flathead Lake discharges into the river of the same name. With a view of utilizing the lake as a reservoir in connection with its plans for the development of power in connection with this project, by the act of March 3, 1911 (36 Stats. L. 1066), as amended August 24, 1912 (37 Stat. L. 527), Congress directed—

"That an easement in, to, and over all lands bordering on or adjacent to Flathead Lake, Montana, which lie below an elevation of nine feet above the high-water mark of said lake for the year nineteen hundred and nine, is hereby reserved for uses and purposes connected with storage for irrigation or development of water power, and all patents hereafter issued for any such lands shall recite such reservation."

Actual development of power by the Government at site No. 1, or elsewhere within the Flathead Reservation, has not yet been had, although considerable sums have been expended and much preliminary work done with that end in view. Subsequent to the passage of the Federal water power act of June 10, 1920 (41 Stats. L. 1063), it was suggested that the power possibilities at Flathead be developed by outside interests rather than by the Government. Accordingly, an item in the act of March 7, 1928 (45 Stats. L. 212–213) authorized the Federal Power Commission upon terms satisfactory to the Secretary of the Interior to issue licenses "for the use, for the development of power sites on the Flathead Reservation and of water rights reserved or appropriated for the irrigation projects."

It was also provided that the rentals from such licenses for the use of Indian lands should be deposited in the Treasury of the United States to the credit of these Indians as a tribe. It will be observed, however, that this statute contemplates the use of both the power sites on the reservation and of the water rights reserved or appropriated for this irrigation project.

Manifestly under this situation two interests are primarily involved, (*a*) that of the Indians and (*b*) the irrigation project, meaning, of course, the landowners under that project. More accurately speaking, the interests of the Indians are twofold, first, as a tribe in the revenue to be derived from these power resources developed from their tribal lands, and, secondly, as individual allottees owning lands under an irrigation project to be supplied in part with water by pumping, power at a cheap rate being essentially for the latter purpose. Approximately 20 per cent of the irrigable lands within the Flathead irrigation project are still owned by individual members of the tribe. Necessarily the Federal Government is concerned in seeing that the Indians receive adequate compensation for the use of their lands for power-site purposes and also that its obligation to the landowners under this project is fulfilled by supplying an adequate quantity of water for irrigation at a minimum cost, it being here borne in mind that the landowners under this system, both Indian and white, are obligated to repay to the United States the cost of irrigation, on a per acre basis.

The Rocky Mountain Power Co., in its brief in support of its application for a license to develop power at Flathead (pp.63 to 68), alleges that the lands included within the power-site area constitute 50 per cent of the value of these power resources and water the remaining 50 per cent; that the water belongs to the State of Montana, and hence the Indians are without right therein. Further, that the Indians are without right or interest in the river and lake bed. This assumption, however, is erroneous. We have just shown that the Indians have a prior right to sufficient of the waters within their reservation for irrigation and other uses, which right is augmented in no small measure by the filings made on these waters by the Government in behalf of this project, pursuant to the statutes of the State. It is also to be recalled that the south half of this lake and the river into which these waters are discharged are within the Indian Reservation. The power-site withdrawal made by the Government in behalf of this project covers certain lands lying along both sides of this stream, and as to such lands, including the river bed embraced therein, the Indian title has not been extinguished. That is to say the withdrawal for power-site purposes in no way operated to extinguish the Indian title to such lands. These Indians, therefore, have a tremendously greater interest in this situation than as alleged or represented by the Rocky Mountain Power Co.

Basing its calculations on the erroneous assumption that the 2,500 acres or less of tribal Indian lands involved represents only 1 per cent of the value of power site No. 1, the Rocky Mountain Power brief proceeds to show that its offer of $1 for horsepower as rental for these lands would yield to the tribe a minimum annual rental of $68,000. On this basis (1 per cent of the value yielding $68,000 annually) the value of the entire site, including both land and water (100 per cent) would be equivalent to an annual yield in rental of $3,400,000—manifestly fallacious.

We now return to the matter of the cost of power for pumping, etc., for the irrigation project and its association with Indian rentals.

During the past few years much discussion as well as debates in congressional committees and on the floors of Congress have taken place in regard to these alleged conflicting interests of the Indians and of the irrigation project. It was vigorously argued, on the one hand, that the Indians' ownership of the power sites is absolute; that this carried with it the right of the Indians to every cent of rental moneys obtainable; and that any reduction of power rates to the irrigation project must necessarily come out of the Indians' rental and thereby cause an unwarranted reduction thereof. On the other hand, it was as stoutly maintained that the irrigation project can not be successful without pumping; that cheap power is essential for pumping; that the Indian owners of project lands and the white settlers who have purchased lands of the project from former Indian owners, are alike vitally interested in this cheap power; and have through all their years of ownership depended upon the government's plans and promises to secure it; that the United States Government itself through its Reclamation Bureau began even though it did not complete a pumping development known as the Newell project, to pump water to the irrigation projects; that the United States irrigation project itself had made water filings under the laws of Montana to make sure of the necessary water for this pumping project; that in an appropriation act approved January 12, 1927, and in every subsequent appropriation act, Congress has provided the money and authorized the procedure with a Government power project for pumping in the event that power is not procurable from the licensing of the Flathead site. Thus has arisen an unfortunate dispute on the question of the legality of the irrigation project's rights. Certainly no one has or can sucessfully contest the equitable grounds of the irrigation project to consideration in the matter of cheap power, even if the legal position has been questioned by some. One of the applicants, the Rocky Mountain Power Co., has recognized this equity from the beginning and has since 1927 put on record its willingness, if granted the license, to supply 15,000 horsepower at special prices to the irrigation project. The revised terms for this 15,000 horsepower are set forth in Exhibit 13 of the Flathead irrigation district, an intervening party in this case, and are as follows:

> A. The power company would agree to deliver at its plant to be erected at the Newell site (No. 1 site) electrical energy to be used by the irrigation project exclusively for pumping water for irrigation, power required by the Government for that purpose up to 5,000 horsepower, at the price of 1 mill per kilowatt-hour delivered, and also such power up to 5,000 horsepower as may be demanded by the United States for all project and farm uses and for sale at the price of 1 mill per kilowatt-hour delivered.
>
> B. The power company will deliver either at the Newell plant or at some place more convenient on the project, to be agreed upon, such additional power up to 5,000 horsepower, as may be demanded by the United States for all project and farm uses and for sale at the price of 2¼ mills per kilowatt-hour delivered.

The Indian Bureau has the double responsibility of protecting fully the tribal rights of the Indians in the matter of power rentals and also of doing everything possible to make a success of the Flathead Indian irrigation project committed to its care. It does not consider that these interests are really conflicting in the sense of the unfortunate dispute above referred to. We have therefore first considered in this memorandum the matter of the Indian rental on its merits just as if there were no irrigation district at all; we have accordingly proposed what seems to be a fair rate of rental, of $2.21 per horsepower; and we have indicated that in the pro forma estimated basis of calculation this involves, if the license is granted to the Rocky Mountain Power Co., an intercompany price of 2.387 mills for the current sold by the Rocky Mountain Power Co. to the Montana Power Co.

This Indian rate of rental having thus been fixed, we can properly turn to the irrigation project and consider it as one special group of general consumers that the United States Government is particularly interested in protecting to the extent of 15,000 horsepower for pumping and for the project and for sale. The justification for this is that the irrigation project is the Government's own project, and the Government's hope of reimbursement depends upon the project's success. The provision for sale of current in the above quotations was based on the expectation that a profit can be realized on the retail sale of electric current purchased at low wholesale prices, and that this profit will enable the Flathead irrigation district to be an assured success and thus reimburse the project's construction costs to the Government more rapidly than would otherwise be possible. In anticipation of this profit from power as first proposed to be made by the Government itself, Congress in the act of May 10, 1926, provided for its disposition in an order of precedence not necessary to state here, and which was fully explained in the hearings by Congressman Cramton, chairman of the House subcommittee on Appropriations for the Department of the Interior.

Now of the prices for power quoted above, that for 10,000 horsepower at 1 mill is lower that the above proposed intercompany price of 2.387 mills; but that for 5,000 horsepower at 2¼ mills is actually a trifle higher. Our problem then is to see how much the intercompany price for the large amount of current sold to the Montana Power Co. needs to be raised in order to offset these relatively small amounts of current at these prices to be reserved by the applicant for the United States for the use of the irrigation project.

This involves an estimate of the load factors of pumping, of resale for farms, etc.; also the number of days of pumping required for the project and the dates. From this a study has been made of the overlap of the irrigation period with the surplus water period, and the consequent proportion of secondary power and of primary power. There was much discussion in the hearings on this subject. Suffice it here to say that the testimony showed an outside demand of 111 days for pumping for irrigation purposes, and that for the purpose of an estimate about 51 per cent would be secondary power and 49 per cent primary power. (See Indian Exhibit 7 prepared by the Rocky Mountain Power Co.) The Rocky Mountain Power Co. submitted in its Exhibit 12 an estimate of its loss through the sale of this block of 15,000 horsepower at the prices quoted. It showed (see below) that the sale of this power would bring $60,500, but that it would cost $123,000, showing a loss of $62,500. Allowing 4,000 horsepower as primary power for the irrigation project, the company deducted this from its estimated capacity of 68,000 horsepower and charged the remaining 64,000 horsepower with the above cost of $62,500, making its estimated cost for the irrigation power $0.98 per horsepower, or $1 in round figures. This estimate of $123,000 cost for this power was figured on a basis of arbitrarily including a maximum demand factor of—

15,000 maximum horsepower at $5.45	$82, 000
4,000 average horsepower at $10.20	41, 000
Total	123, 000

Attention should be called to the fact that in making the above quotations to the irrigation project no maximum demand factor was therein included, the quotations being straight kilowatt-hour prices. Why, then, should not a straight kilowatt-hour average cost be likewise used in reckoning the difference between actual revenue and actual cost? This average basis would surely be true to facts in this company's load, because what power under the maximum the irrigation project will not take will not thereby be lost, but will be otherwise absorbed into the system and realized on.

Assuming the company's own calculations of load as set forth in Exhibit 12, we then have:

Maximum horsepower	Average horsepower	Average kilowatts	Kilowatt-hours	Price	Revenue
10, 000	[1] 3, 000	2, 250	19, 600, 000	$0. 001	$19, 600
5, 000	[2] 2, 500	1, 875	16, 360, 000	. 0025	40, 900
15, 000	5, 500	4, 125	35, 960, 000	------------	60, 500

[1] 30 per cent load factor.

[2] 50 per cent load factor.

For the sake of conservatism, let us assume that all of the 5,500 horsepower is prime power.

The average sale price of the 35,960,000 is $0.0016824 per kilowatt-hour; i. e., $11.05 per horsepower.

The estimated cost with 8 per cent return and including $2.21 Indian rental has been shown to be $15.60 per horsepower or 2.387 mills per kilowatt-hour.

Then 35,960,000 kilowatt-hours by 2.387 equals $85,836 is the cost of this power.

Hence, on the company's own basis of load factors, and even disregarding secondary power, and on the basis of average cost, this block of 15,000 horsepower at the prices quoted will produce an out-of-pocket loss of only $25,336. This represents about $0.32 per horsepower for the 80,500 capacity at Flathead instead of $0.98 per horsepower the way the company figured it.

Now returning to the necessary adjustment of the intercompany price to provide for these 15,000 horsepower for the irrigation district, we have:

528,800,000 kilowatt-hours at 2.387 mills (at $15.60 per horsepower)	$1, 262, 246
35,960,000 kilowatt-hours at 1.6824 mills	60, 500
492,840,000 kilowatt-hours at 2.439 mills (at $15.94 per horsepower)	1, 201, 746

Hence by the raising of the intercompany price from 2.387 mills to 2.439 mills; i. e., from $15.60 per horsepower to $15.94 per horsepower, for the 492,840,000 kilowatt-hours sold by Rocky Mountain Power Co. to Montana Power Co., the 15,000 horsepower for the irrigation project can be sold at the prices quoted and the Rocky Mountain Power Co. will still have its full average revenue of 2.387 mills; i. e., $15.60, which will enable it to pay the undiminished Indian rental of $2.21 and preserve its own 8 per cent return.

Mr. Wheeler stated at the hearings that if granted the license he would be willing to supply the irrigation district with power as the commission might require.

Assuming, then, the same power requirements and the load factors as used above for the other applicant, we would have for Wheeler on his estimate of 6,000 cubic feet per second of water:

(1) The same revenue, viz, $60,500, based on the average price of 1.6824 mills per kilowatt-hour.

(2) His cost of $15 per horsepower at 8 per cent return and including $2.33 for Indian rental is 2.2813 mills per kilowatt-hour.

We have then on Wheeler's estimated capacity of 689,000,000 kilowatt-hours:

689,000,000 kilowatt-hours at 2.2813 mills ($15 per horsepower)	$1, 571, 816
35,960,000 kilowatt-hours at 1.6824 mills	60, 500
653,040,000 kilowatt-hours at 2.3143 mills ($15.20 per horsepower)	1, 511, 316

This would mean either (1) Mr. Wheeler would have to raise his price to consumers from $15 to $15.20 per horsepower; or (2) he would have to cut the Indian rental by $0.20 as suggested above; or (3) he would have to be satisfied with $0.20 per horsepower less return than he is entitled to.

If only 5,440 cubic feet per second of water is available, a similar calculation will result in a cost of $15.23, so that there would be a $0.23 adjustment as above instead of $0.20.

CONCLUSION IN RE 15,000 HORSEPOWER FOR IRRIGATION PROJECT

The Indian Bureau believes that the matter of this 15,000 horsepower for the irrigation project has had far more adverse discussion than it deserves; that it would be most fortunate for the best interests of the Indians and of their neighbors if all would realize that they have common interests in making the irrigation project a success for the good of all; that accordingly the obtaining of this cheap power for the project's use in pumping and for farms, etc., is highly desirable; and in fact that it is unthinkable that the opportunity to get it shall not be availed of. This does not mean, as some friends of the Indians may have feared, that the Indian Bureau does not recognize fully the rights of the Flathead Indian Tribe as the equitable owner of the power sites concerned. These rights are fully recognized and preserved and no precedent to the contrary can be set up from the disposition of this case. And further, while thus recognizing the tribal interest, the Indian Bureau also recognizes the rights and equities of individual members of the tribe as residents in and owners of land in the community chiefly to be benefited by the erection of the power project or projects including the Flathead irrigation project, dependent in part, as it is, on power at a reduced rate to supply water for irrigation and other purposes.

Accordingly, we urge the Secretary of the Interior and the Federal Power Commisson in granting a license for site No. 1 to either of the applicants, to insert in said license conditions for the reserving to the United States Government for the use and benefit of the Flathead irrigation project of 15,000 horsepower of electric power substantially as set forth in paragraphs A, B, D, E, K, L, and N of the Rocky Mountain Power Co.'s memorandum of February 17, 1927, as amended December 30, 1928, by agreement with the Flathead irrigation district, and on the terms and conditions therein stated. See Exhibit 13 of Flathead irrigation district, intervening party to the proceedings.

VIII. THE FOUR OTHER FLATHEAD POWER SITES.

It is the task of the Indian Bureau to secure all possible advantages to the Indians while preserving the interests of the public. Hence, the fullest possible development of the Flathead sites would seem to be desirable from the standpoint of the Indians' interests.

Applicant Wheeler has applied for a preliminary permit for all five sites but is not ready to apply for a license to proceed with any immediate development. Applicant Rocky Mountain Power Co., on the other hand, has applied for a license for immediate development of site No. 1, and for a preliminary permit for the other four sites; but it stated in the hearings it could not tell when, if at all, it would develop these four sites.

In view of the immediate and financial advantage to the Indians in the development of site No. 1 by the Rocky Mountain Power Co., provided an adequate rental basis can be agreed upon, the Indians' interest would seem to be secured by the issuance of such a license for site No. 1. If site No. 1 should be thus licensed to this applicant, the Indian Bureau would hope that a preliminary permit for one or more of the other four sites for a limited period might also be issued to applicant Wheeler, so that if he can be successful in bringing new industries to the Flathead neighborhood, as he hopes, the chance may be given him to do so. It is the Indian Bureau's understanding that the license for site No. 1 would have in it an article that will provide for

Flathead power applications—analysis of power features for site No. 1

Factors	Estimates: Rocky Mountain estimates	Estimates: Wheeler's estimates	Actual: Montana Power Co. System—Actual	Indian Office adoptions: Rocky Mountain Power Co.	Indian Office adoptions: Wheeler's
Cubic feet per second, 80 per cent of the time	Without dredging of lake outlet, [illegible]	With dredging of outlet, [illegible]		With dredging if required, [illegible]	With dredging: as estimated, [illegible]; as adjusted, [illegible]
Static head	[illegible] feet			[illegible] feet	
Effective head		175 feet			[illegible] feet
Overall efficiency	Calculated on static head, 70 per cent	Calculated on effective head, 87½ per cent	[illegible] plant, 75 per cent	77 per cent	[illegible] per cent
Utilization factor	[illegible] per cent	100 per cent	Company average for last 5 years, [illegible] per cent	[illegible] per cent	100 per cent
Installation:					
Horsepower	[illegible]	[illegible]	1928, [illegible] [1]	[illegible]	[illegible]
Kilowatts	[illegible]	[illegible]	1928, [illegible] [1]	[illegible]	[illegible]
Average output:					
Prime, horsepower	[illegible]	[illegible]	1926, [illegible]; 1928, [illegible] [1]	[illegible]	As estimated, [illegible] As adjusted, [illegible]
Prime, kilowatts	[illegible]	[illegible]	1926, [illegible]; 1928, [illegible] [1]	[illegible]	
Average output, kilowatt-hours	[illegible]	[illegible]	Actual kilowatt-hours generated, 1926, [illegible]; 1928, [illegible]	[illegible]	As estimated, [illegible] As adjusted, [illegible]
Actual output:					
Horsepower			[illegible] [1]		
Kilowatts			[illegible] [1]		
Peak load of plant on basis of 80 per cent annual load factor:					
Horsepower	[illegible]	[illegible]	[illegible] per cent (1928 company report)	[illegible]	As estimated, [illegible]
Kilowatts	[illegible]	[illegible]		[illegible]	As estimated, [illegible]
Annual capacity factor based on installation	[illegible] / [illegible] [illegible] per cent	[illegible] / [illegible] 70 per cent	[illegible] / [illegible] 71 per cent	[illegible] / [illegible] [illegible] per cent	[illegible] / [illegible] as estimated, 70 per cent
Total investment cost, site No. 1	$[illegible]	$[illegible]	1928 company report, $[illegible]; 1927 company report, $[illegible]	$[illegible] [4]	$[illegible]
Investment cost per—					
Average prime horsepower	$[illegible]	$[illegible]	Based on average output: 1928, $[illegible]; 1927 investment cost, 1928 capacity, $[illegible]	$[illegible]	As estimated, [illegible] As adjusted, [illegible]
Average prime kilowatts	$[illegible]	$[illegible]	Based on average output: 1928, $[illegible]; 1927 investment cost, 1928 capacity, $[illegible]	$[illegible]	As estimated, [illegible] As adjusted, [illegible]
Annual generating cost site No. 1 (including return):					
Operating expenses	[illegible] per cent — [illegible]	1.5 per cent — $[illegible]	[illegible] per cent, [illegible] mill [5] — $[illegible]	[illegible] per cent — [illegible]	1.5 per cent — [illegible]
Repairs		[illegible] per cent — [illegible]	[illegible] per cent, [illegible] mill [5] — [illegible]	[illegible] per cent — [illegible]	[illegible] per cent — [illegible]
Overhead expenses	[illegible] per cent — [illegible]	1 per cent — [illegible]	[illegible] per cent, [illegible] mill [5] — [illegible]	[illegible] per cent — [illegible]	1 per cent — [illegible]
Taxes, insurance, etc.	[illegible] per cent — [illegible]	1.5 per cent — [illegible]	[illegible] per cent, [illegible] mill [6] — [illegible]; $[illegible].73	[illegible] per cent — [illegible]	1.5 per cent — [illegible]
Depreciation, obsolescence	[illegible] per cent — [illegible]	[illegible] per cent — [illegible]	[illegible] per cent, [illegible] mill [5] — [illegible]	[illegible] per cent — [illegible]	[illegible] per cent — [illegible]
Amortization				[illegible] per cent — [illegible]	[illegible] per cent [7] — [illegible]
Return on investment—					
Bond interest	[illegible] per cent — [illegible]	[illegible] per cent [8] — [illegible]	[illegible] per cent: [illegible] mills, [illegible] at [illegible] per cent return — [illegible]	[illegible] per cent — [illegible]	[illegible] per cent [7] — [illegible]
Net	[illegible] per cent — [illegible]	[illegible] per cent — [illegible]	[illegible] mills, [illegible] ([illegible] per cent return) — [illegible]		
	[illegible]	[illegible]			
Total	[illegible] per cent — 1,677,[illegible]	[illegible] per cent — [illegible]	[illegible] per cent, [illegible] mills, [illegible] — [illegible].73	[illegible] per cent — 1,677,[illegible]	10.1 per cent — [illegible]
Rentals (Indian)	[illegible] per cent, at $[illegible] per horsepower — [illegible]	1.24 per cent, [illegible] horsepower at $[illegible] — [illegible]			
Settling site owners	[illegible] per cent, at $[illegible] per horsepower — [illegible]				
Revenue or generating cost, including rentals (including return)	[illegible] per cent — [illegible]	[illegible] per cent — [illegible]			
Annual generating cost, including return and excluding rentals:					
Per horsepower year	$[illegible]	$[illegible]	Return, at [illegible] per cent — [illegible] Return, at [illegible] per cent — 7.73	$[illegible]	As estimated — [illegible] As adjusted — [illegible]
Per kilowatt year	$[illegible]	$[illegible]	Return, at [illegible] per cent — [illegible] Return, at [illegible] per cent — [illegible]	$[illegible]	As estimated — [illegible] As adjusted — [illegible]
Annual generating cost, including returns and rentals:					
Per horsepower year	$[illegible]	$[illegible]		$[illegible]	Including rentals to Indians, $[illegible] per horsepower (as estimated), [illegible]. For settlers, $[illegible] per horsepower (as estimated).
Per kilowatt year	$[illegible]	$[illegible]		$[illegible]	
Generating cost per prime kilowatt-hour only, excluding rentals	[illegible] mills	[illegible] mills	Return, at [illegible] per cent, [illegible] mills; Return, at [illegible] per cent, [illegible] mills — [illegible] mills	[illegible] mills	As estimated, [illegible] mills As adjusted, [illegible] mills
Generating cost per prime kilowatt-hour only, including rentals	[illegible] mills	[illegible] mills		Including Indian rentals, [illegible] mills; including Indian rentals and irrigation project, [illegible] mills	As estimated, [illegible] mills

[1] Wheeler's Exhibit 17 and Major Butler's report.
[2] From Major Butler's supplemental report.
[3] Kilowatt-hours sold in 1928, [illegible].
[4] Changing company's figures by deducting development cost $[illegible] and adding dredging cost, $[illegible].
[5] Cost per kilowatt-hour generated.
[6] All taxes.
[7] Reduced.
[8] Wheeler's return is [illegible] per cent.

NOTE.—Actual kilowatt-hours generated 1927, [illegible]; kilowatt-hours sold 1927, [illegible]; kilowatt-hours generated 1928, [illegible]; kilowatt-hours sold 1928, [illegible] (approximate).

NOTE.—No allowance is here included for Thompson Falls added profit to Montana Power Co. This will be under regulation of Montana Public Service Commission.

regulation of the lake under such reasonable rules and regulations as the Federal Power Commission may prescribe for the fullest practicable utilization of the waters of Flathead River; and that under this protection, applicant Wheeler could successfully develop the lower sites. Such an arrangement would assure an early income to the Indians from site No. 1 and would also exploit the possibilities of the other sites for industrial development, which would furnish opportunities for development, the opening of a local market, etc.

So far as concerns the fixing of a rental to the Indians for these lower sites, the Indian Bureau believes that the facts concerning each site can best be considered separately at the time of the issuance of a license for it, and that the rental can then be fixed for it as a separate proposition following the precedent and the experience gained in the way that site No. 1 works out.

Conclusion

In concluding this memorandum on the Flathead power development, we are pleased to state that it seems possible at last to solve this complex problem which has been so fraught with disputes for such a long time, and do it to the satisfaction of all of the interests involved. Upon analysis it has developed that the advantages and resulting low costs of this power site will make it possible (1) to give the developing licensee a full return upon the investment; (2) to considerably increase the Indian rental beyond the offers made or even the expectations of the Indians; (3) to provide for the full amortization of the power development cost during the 50-year period of the lease and at the close of the lease its return to the Government for the Indians as a going concern fully paid for, then to be released or otherwise disposed of as may then seem best; (4) to accommodate the irrigation project by the granting in full of its request for cheap power; (5) should the license be granted to the Rocky Mountain Power Co., to make available from the Flathead development itself and from the beneficial effects therefrom upon the Thompson Falls plant of the Montana Power Co. certain further amounts which under the regulation of the Montana Public Service Commission will be available for rate reductions for the benefit of the general consumers of the latter company; (6) should the license be granted to Mr. Wheeler, to make available from the Flathead development advantages to the Indians and other people of that section from the introduction of new industries, with resulting opportunities for new employment, new markets, etc.; (7) to establish a method of calculation of Indian rentals for power sites; (8) to provide for proper regulation by the Federal Power Commission in conjunction with the State public service commission that is involved, of the licensee that makes the development.

Respectfully submitted.

J. Henry Scattergood,
Assistant Commissioner.

SUPPLEMENTAL MEMORANDUM

MAY 14, 1930.

Hon. RAY LYMAN WILBUR,
Secretary of the Interior.

SIR: Supplementing Indian Bureau's revised memorandum dated December 30, 1929, in re Flathead power development, we now submit the following further statement:

APPLICANT ROCKY MOUNTAIN POWER CO. SELECTED FOR SITE NO. 1

It will be remembered that the applications received were—

(1) From Rocky Mountain Power Co. for final license for immediate development of Flathead site No. 1, and for preliminary permit for investigating sites Nos. 2, 3, 4, and 5.

(2) From Walter H. Wheeler for preliminary permit for investigating all five sites Nos. 1, 2, 3, 4, and 5.

In the Indian Bureau's memorandum just referred to, the facts and variables relating to power as to both applicants were set forth, without an effort to consider the ability to market and to finance, or the practicability of the plans of applicant Wheeler for fertilizer manufacture, etc. We understand that you have received reports in relation to the feasibility of the manufacture of fertilizer from the experts in the Agricultural Department; also that the Federal Power Commission on the showings made by the applicants have recommended that the Rocky Mountain Power Co. be awarded the license for site No. 1 as applied for, provided satisfactory terms of Indian rental could be agreed upon, and that applications from both applicants for preliminary permits upon the other four sites be rejected.

INDIAN RENTALS

Reference is made to our previous memorandum where we showed the inadequacy of the offers of Indian rentals made by either of the two applicants. We are pleased now to be able to state that this view has been amply supported by the separate studies made by the Federal Power Commission and by the Army Engineers, the latter having been requested by the Secretary of the Interior to make a fresh and independent study. For the sake of the record all of the different studies are here briefly summarized.

THREE METHODS OF CALCULATION OF INDIAN RENTAL

There are three methods by which Indian rentals can be set up: (1) At a fixed rate per horsepower produced; (2) at a combination of fixed charge and energy charge; and (3) at a flat rental basis, regardless of the amount of output. These are further described as follows:

(*1*) *At a rate per horsepower and estimated at a "spot" of production.*—The first method was prepared in the offers of the two applicants.

Rocky Mountain Power Co. offered $1 per horse-power-year. At the hearings it estimated on 5,400 cubic feet of water per second, resulting in 80,000 horsepower prime power for site No. 1, which is the same as per the Federal Power Commission formula. However, this applicant further estimated a utilization factor of only 85 per cent, thus reducing the estimate of prime power capacity produced and taken to 68,000 horsepower, which at $1 per horsepower would have made $68,000 average Indian rental for site No. 1 on a "spot" basis of 68,000 horsepower.

Applicant Wheeler offered $1.12½ per horsepower-year. At the hearings he submitted, based on 6,000 cubic feet of water per second, an estimate of prime power capacity for site No. 1 of 105,000 horsepower using a higher over-all efficiency factor (87½ per cent) than the commission and a utilization factor of 100 per cent. On this "spot" basis of 105,000 horsepower, the Indian rental at $1.12½ per horsepower would be $118,125 for site No. 1. Applicant Wheeler's figures would, however, be subject to reduction on account of the commission's limitation to 1,100,000 acre-feet of storage (10 feet difference of levels, on account of certain as yet unsolved problems which will result from changing the levels of the lake. As stated in our revision of our previous memorandum, this would result in only 5,440 cubic feet of water per second instead of 6,000 cubic feet and would reduce applicant Wheeler's prime power capacity from 105,000 horsepower to 95,000 horsepower. At $1.12½ per horsepower Mr. Wheeler's Indian rental on the "spot" basis of 95,000 horsepower would be reduced to $106,875.

In our previous revised memorandum, an effort was made to develop an Indian rental rate per horsepower comparable to the two offers made by the applicants. This calculation was likewise based upon 5,440 cubic feet of water per second, resulting in a prime power capacity of 80,500 horsepower. On this basis, the cost per horsepower was estimated to be $13.39 per horsepower-year to Rocky Mountain Power Co., and $14 (for 95,000 horsepower) for Mr. Wheeler. Rocky Mountain Power Co. proposed in the hearings a selling price of $18 per horsepower including $1 per horsepower for the Indian rental and $1 estimated cost per horsepower of supplying the irrigation district with power at specified low rates. It was also shown that the cost per horsepower including 8 per cent return to Montana Power Co. in the year 1926 was $17.78, said return being based upon the company's valuation of tangible values. (It may be said in passing, that if this basis of valuation is a pre-war cost plus actual additions since 1913 at cost, it would be comparable with the net investment cost basis used in the above applicants' calculations).

On the further assumption that the Flathead Indian Tribe and the general public are each entitled to about one half (approximately in proportion to their interests in the Flathead River and Lake), this figures that for applicant Rocky Mountain Power Co. on a "spot" basis of 80,500 horsepower, the Indian rental would be $2.21 per horsepower, which equals $177,905 per annum. The irrigation district, if it actually costs anything other than secondary power, will be supplied from the public's share. As to applicant Wheeler, his selling price is limited by his plan to $15 per horsepower; his cost as adjusted would be $14, leaving only $1 for the Indians, assuming that they would get it all, and the public's share would be in the low price to the new industries that he would hope to attract. In this case, the irrigation district would not be considered at all.

(2) *Combination of a fixed rental plus an energy charge.*—This second plan of estimating Indian rental was used by (*a*) Federal Power Commission in its schedule of January 2, 1930; (*b*) Army engineers (when specially called upon by the Secretary of the Interior for an independent study of February 27, 1930 and revised March 29, 1930); and (*c*) by the Indian Bureau in its Schedule No. 2 dated April 1, 1930, and which was discussed by the Secretary of the Interior with the Montana congressional delegation. All of these estimates were based on studies of the variables with a view that after the production cost including fair return to the company had been covered, any further margin of profit should be divided between the Indians and the public (through the company under regulation). The variables were (1) development cost; (2) transmission line cost (in the Army schedule only); (3) annual operation charges; (4) annual transmission charges (in the Army schedule only); (5) revenue at Flathead, and at Anaconda (in the Army schedule only). In effect, this kind of a schedule of rates is one of adopting a minimum fixed rental charge up to a given horsepower development, plus an energy charge for development above that point and at such a rate as will divide the excess between the Indians and the public (through the company under regulation). This plan results in a constantly diminishing cost per kilowatt-hour to the company and in a steadily rising rate of rental per horsepower to the Indians, and is in effect a profit-sharing arrangement and is the kind that is often used in contracts for wholesale power.

The advantage in this plan is that in the higher brackets of power production, the Indians would be able to secure considerably greater rentals. The disadvantage is that in the lower brackets where the profit is insufficient even for a fair return to the company, the Indians must either run the risk of little or no rental or they must be given a fair minimum rental. Even this minimum will then show a heavier loss to the company than it proved willing to agree to. Furthermore a number of difficulties were encountered in all these profit-sharing plans in providing against any possibility of the use of the Flathead plant for peaking purposes only or in dull times the giving to it of only a reduced proportion of the entire system load, and in general the avoiding of the temptation to starve this plant in order to reduce the Indian rental. Four months of negotiations were consumed in discussing those various plans and the variables upon which they were based and we were never able to reach an agreement. Several deadlocks actually developed with the breaking off of negotiations. Finally efforts on these lines were abandoned and a new approach was entered upon with the plan of a flat rental.

For the record there are appended hereto the three schedules referred to above which were proposed for discussion respectively by Federal Power Commission, the Army engineers, and the Indian Bureau.

(3) *Flat rental.*—The third plan of a flat rental basis was finally agreed to on terms as set forth below. This plan of rental has the advantages of (1) reducing all risks to the Indians and providing an assured, definite and uniform rental regardless of the amount of use of the plant by the licensee; (2) it avoids the difficulties of assuring to the Flathead plant its fair porportion of system load; (3) it avoids

any inducement that Flathead be used for peaking purposes, or that it be starved unduly at high water periods when other plants of the system could carry an increased share of the load; (4) it avoids all problems arising from any form of partnership of the Indians with the licensee; and (5) it eliminates subjecting the Indians to the ups and downs of business and to industrial depressions, a feature which especially exists in Montana, where the electric demand is so largely industrial in character. In the case of applicant Wheeler, whose plan provided for an exclusively industrial load, this business variation of load would have had its maximum effect upon Indian rentals.

The basis of agreement as to Indian rentals reached with Rocky Mountain Power Co. is as follows:

Article 30: (*a*) The licensee shall pay into the United States Treasury as compensation for the use, in connection with this license, of the Flathead Indian tribal lands annual charges computed as follows:

(1) A charge at the rate of $1,000 per calendar month, beginning with the month in which the license is issued and extending to and including the month in which the project is placed in commercial operation. For the purpose of the payments under this article, the beginning of commercial operation shall be considered as the time when one of the licensee's generating units shall have been installed, tested, and demonstrated to be in suitable condition to produce electric energy for commercial purposes with a reasonable degree of reliability.

(2) A charge at the rate of $5,000 per month, beginning with the calendar month next succeeding the date on which the project is placed in commercial operation and extending to the end of the calendar year in which such commercial operation shall commence.

(3) For each full calendar year from and after the 1st of January next following the date on which the first unit is placed in commercial operation, annual charges will be as follows:

	Per year
For the first two years	$60, 000
For the third year	75, 000
For the fourth year	100, 000
For the fifth year	125, 000
For the next five years	150, 000
For the next five years	160, 000
For the next five years and/or until readjustment of the annual charges payable hereunder shall have been effected pursuant to the provisions of par. (D) of this article 20	175, 000

(B) Payments shall be made for each calendar year within 30 days after the close thereof on bills rendered by the commission.

(C) Pursuant to the provisions of the act of March 4, 1929 (45 Stat. 1640), all charges for reimbursing the United States for the cost of administration of the Federal water power act have been and are hereby expressly waived.

(D) The annual charges payable under this license may be readjusted at the end of 20 years after the beginning of operation under this license and at periods of not less than 10 years thereafter by mutual agreement between the commission and the licensee, with the approval of the Secretary of the Interior. In case the licensee, the commission, and the Secretary of the Interior can not agree upon the readjustment of such charges, it is hereby agreed that the fixing of readjusted charges shall be submitted to arbitration in the manner provided for in the United States arbitration act (U. S. C., title 9), such readjusted annual charges to be reasonable charges fixed upon the basis provided in section 5 of regulation 14 of the commission, to wit, upon the commercial value of the tribal lands involved, for the most profitable purpose for which suitable, including power development.

The Indian Bureau believes this scale of rentals forms a very satisfactory settlement. It greatly exceeds the offers made by both applicants. For purposes of ready comparison we append a chart which shows the agreed rentals, the original offers, and also the estimates based upon studies of the variables made by the Indian Bureau, the Federal Power Commission, and the Army engineers.

From this it will be noticed how closely all the estimates converge in the zone of 70,000 to 85,000 horsepower, which are the probable points of usual development.

GUARANTY

The guaranty for performance of Rocky Mountain Power Co. is made—

(1) by Montana Power Co., the parent company, guaranteeing the completion of the installation by Rocky Mountain Power Co. (the subsidiary company) of three units of 50,000 horsepower each or a total of 150,000 horsepower within four years, i. e., to start construction within one year and to complete construction within three years thereafter;

(2) by Montana Power Co. entering into a contract with Rocky Mountain Power Co. for the 50-year period of the lease to take all of its production of electric energy except such current as is taken by the United States for the reservation and the irrigation district up to a maximum of 15,000 horsepower. Said electric energy is to be paid for by the Montana Power Co. on the basis of actual cost, including Indian rental plus 8 per cent return upon the net investment cost. This will be an assurance of a market for the entire period of the license and will in effect act as a guaranty that Rocky Mountain Power Co. will be able to carry out its obligations, including the payment of Indian rentals.

POSSIBLE INCREASE OF WATER FLOW IN FUTURE

As stated above, the Federal Power Commission has set a limit in the present license (and in accordance with the application) of 10 feet of storage in Flathead Lake, making a minimum of 1,100,000 acre-feet. If in the future, the problems of the lake levels can be safely solved, so that the Federal Power Commission will feel warranted in allowing a greater storage to be developed than 10 feet, then it will be in order for an application to be filed for the amending of the license. Such a proceeding will result in a corresponding increase of Indian rental based upon the increased earning power of site No. 1. It is hoped that at least by the time the first readjustment of rental is made at the end of 20 years, it will be possible that this increase of storage will have been found feasible.

CORPORATE SET-UP AND REGULATION IN THE PUBLIC INTEREST

It is especially gratifying to the Indian Bureau that the license as drawn carries out so fully its suggested plan of corporate set-up and regulation and which in these respects forms a model lease. This includes the continuance of the separate corporate existence of Rocky Mountain Power Co., which is a very important consideration in the simplification of accounting and future calculations for Indian rental readjustments. It has also been agreed by the applicant that all of its (the subsidiary's) securities are to be held unless otherwise allowed by the Federal Power Commission in the treasury of the Montana Power Co. (the parent company) or by a trustee for it, and that all of these securities shall be sold to Montana Power Co. for cash or its equivalent. This means no bonus securities and no overcapitalization.

It may be said in passing that so far as proper regulation and corporate set-up is concerned it is not necessary that all of the securities of the subsidiary should continue to be held in the parent company's treasury. It is sufficient that only the equity-bearing common stock be so held and the bonds and preferred stock, if any, could as well be sold to and be held by the public. In this case, however, the company prefers to sell to the public Montana Power Co. securities and to retain in its treasury or in the hands of a trustee all of the securities of the subsidiary.

The license also provides that in the intercompany agreement between the subsidiary and the parent companies, as already stated, the intercompany price of current will be sufficient and only sufficient approximately to cover the actual operating costs, including Indian rental plus an 8 per cent return upon the actual legitimate investment as established under the provisions of the Federal water power act. This means that this intercompany cost-plus-return price will be based upon the prudent investment valuation, and will be a bedrock price. For regulation as between the Federal and State Commissions, this is an ideal arrangement in that under the Federal license the return will be limited to 8 per cent upon cost, 8 per cent being the prevailing allowed rate in Montana; and there will be turned over to the pool of the Montana Power Co. and be put under State regulation the entire production of the subsidiary (except the power taken by the United States) at this lowest possible price. We have already shown in Indian Bureau's memorandum of December 30, 1929, that this cost at Flathead site No. 1 will be less than the average cost of the Montana Power Co.'s system as shown in the year 1926. Hence the coming into the Montana Power Co.'s system of this lower cost current (with its return on generating investment already taken care of) should have the effect of lowering the average cost of the entire system, and, under the State regulation, be of advantage to all of the consumers on its lines. The gain at Thompson Falls will likewise have a favorable effect. Thus, not only the Indians but the general public of Montana should be the gainers by the Flathead development.

In this connection it is important to note that this low intercompany price will be a matter of open publicity through the annual reports of the subsidiary and the parent companies as rendered to the

State commission. This will therefore serve as the "yardstick," so often referred to in public-ownership cases, by which the actual cost-plus return on cost will be always available. This clean cut and open publicity is one of the most important factors in successful regulation of public utilities. We believe that this Flathead case as arranged can be taken as a model lease in this respect.

IRRIGATION DISTRICTS

It will be remembered that in 1927, and again in 1928, the applicant had voluntarily agreed to sell to the United States for the irrigation district up to 15,000 horsepower at prices of 1 mill for 10,000 horsepower and 2½ mills for 5,000 horsepower. In Indian Bureau's memorandum of December 30, 1929, it was shown that the latter price of 2½ mills is greater than the estimated cost at Flathead site No. 1, including return and Indian rental. Hence, on the 5,000 horsepower block there will be no loss. On the block of 5,000 horsepower at 1 mill for pumping and 5,000 horsepower at 1 mill for general uses and for sale, there will probably be very small loss, if any, because much of this use will be at the time of secondary power. However, even if the load factors are as the applicant has estimated and a part is primary power, we have shown in our memorandum of December 30, 1929, that after the calculation of the Indian rental, by a slight increase in the intercompany price, the small cost of this power will be provided for without in any way affecting the Indian rental.

It may be added that in all our negotiations regarding the Indian rentals this matter of the irrigation power was completely ignored. It was recognized by the company's representatives, as well as by those representing the Government, that at Thompson Falls there will be developed, because of Flathead storage, more than twice as many additional kilowatt-hours than can possibly be used in the entire irrigation 15,000 horsepower demand. Hence, this delivery of this power can and will be provided without the slightest effect in reducing the Indian rental.

Accordingly there have been included in the license the features desired by the irrigation project and already agreed to, as stated, viz:

(1) The agreement to supply the 15,000 horsepower at the prices previously stated.

(2) To refund the $101,000 to the Government for the cost of Newell Tunnel, which will be completed and used by applicant for river diversion during construction.

(3) The supplying to the project up to 500 horsepower at line voltage during the construction period.

(4) The right to use Flathead Lake and River water above the dam for irrigation purposes, provided not more than 50,000 acre-feet shall be used after July 15 in any year.

AMORTIZATION

It will be recalled that in the Indian Bureau's memorandum of December 30, 1929, we recommended that if legally possible under the special powers of the Secretary of the Interior in this case it would be desirable to provide for an amortization charge of 0.6 per cent to be included in the licensee's operating expenses and that such charges should be set aside in an amortization fund and kept invested and reinvested in such fund, so that at the end of the 50 years of the lease the property might be recaptured and be turned back to the Indians fully paid for. This desirable feature proved to be impossible of accomplishment because under the Federal water power act, no such setting up of an amortization charge is provided for, nor could the Secretary's powers be stretched to include such a power against the licensee's resistance. There is, however, provision that after 20 years of the license, certain provisions in reference to surplus earnings being used for amortization shall become operative. As under the set-up of this license there will be no appreciable surplus earnings, this provision will not be operative.

However, the right of recapture for the Indians at the end of 50 years exists under the Federal water power act, and can be exercised provided a fund will be available to meet the outstanding net investment cost to the licensee. To provide such a fund it would be possible, if thought desirable and if approved by the Indians, for Congress to set aside each year from the funds of the Indians an amount sufficient at compound interest to build up such an amortization fund.

RECOMMENDATIONS

(1) The Indian Bureau recommends the issuance of the license for site No. 1 for immediate development as now agreed upon to Rocky Mountain Power Co.

(2) The Indian Bureau repeats its hope, as expressed in the previous memorandum, that a way may be found for the early exploration with a view to development, of the Flathead sites Nos. 2 to 5 so that the Indians may have a revenue from them at the earliest possible date.

Applicant Rocky Mountain Power Co. has stated in the hearings that it would not soon proceed to such development even if granted the preliminary permit. Applicant Wheeler has urged that if granted a preliminary permit, he believes he could secure actual contracts for the sale of power. Although it is recognized that he has not yet made a sufficient showing of ability to market the power, yet it is hoped that he may be at least given an extension of time to do so, so far as sites Nos. 2 to 5 are concerned, rather than be rejected outright. If there is any real chance of his exploiting the possibilities of these other four sites for industrial development, it would seem desirable to give him opportunity for a limited time to show what he can do.

Respectfully submitted.

J. Henry Scattergood,
Assistant Commissioner.

Approved:

C. J. Rhoads, *Commissioner.*

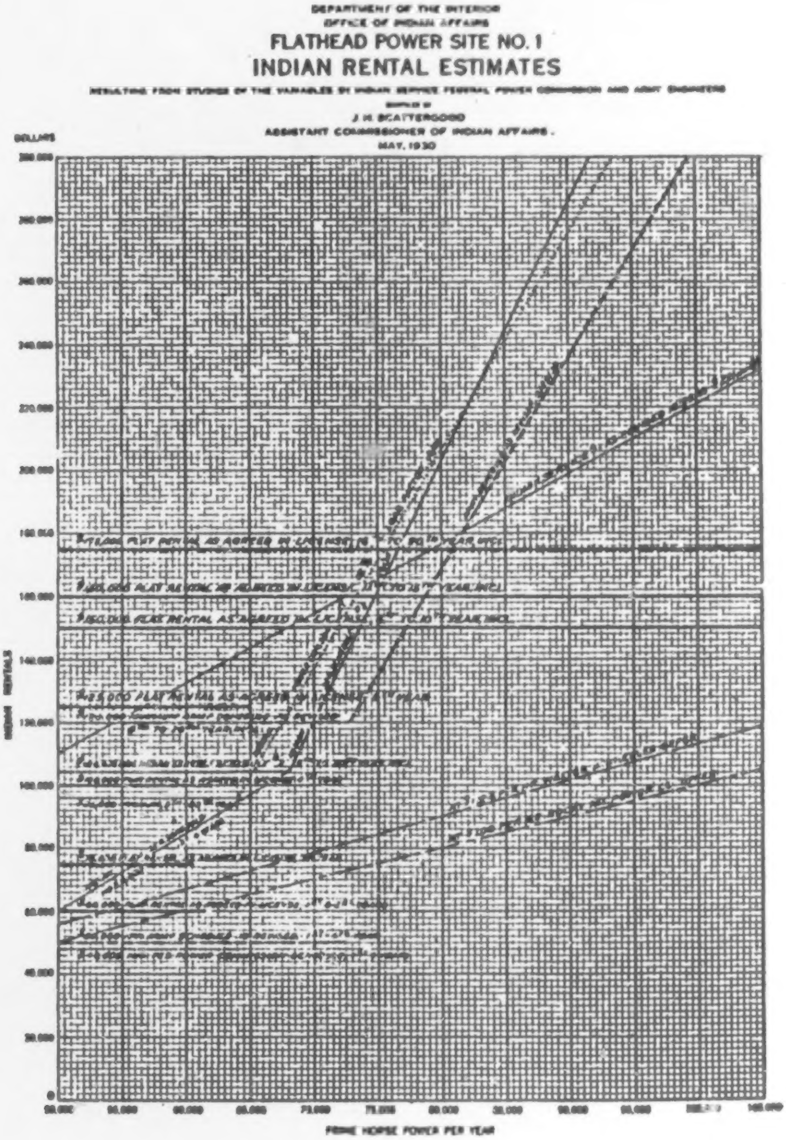
APPENDIXES

Federal Power Commission schedule, January 2, 1930.

Army Engineers' schedule, February 27, 1930; revised March 29, 1930.

Indian Bureau schedule No. 2, April 1, 1930.

Copy of license issued May 23, 1930, to Rocky Mountain Power Co. for site No. 1.


DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS
FLATHEAD POWER SITE NO. 1
INDIAN RENTAL ESTIMATES
RESULTING FROM STUDIES OF THE VARIABLES BY INDIAN SERVICE FEDERAL POWER COMMISSION AND ARMY ENGINEERS
COMPILED BY
J. H. SCATTERGOOD
ASSISTANT COMMISSIONER OF INDIAN AFFAIRS.
MAY, 1930
DOLLARS
INDIAN RENTALS
300,000
280,000
260,000
240,000
220,000
200,000
180,000
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
$175,000 flat rental as agreed in license 16th to 50th year incl.
$165,000 flat rental as agreed in license 11th to 15th year incl.
$150,000 flat rental as agreed in license 6th to 10th year incl.
$125,000 flat rental as agreed in license 5th year
50,000
55,000
60,000
65,000
70,000
75,000
80,000
85,000
90,000
95,000
100,000
PRIME HORSE POWER PER YEAR

SUGGESTED FEDERAL POWER COMMISSION SCHEDULE

Proposed Charge for Indian Land

JANUARY 2, 1930.

In the event the commission decides to authorize a license for site 1 in the above case, it appears that the following may offer a rough outline of a logical method for determining the reasonable charge to be fixed for the use of the Indian land.

The uncertainties make this problem difficult. Obviously, there is no exact answer. The appraisal of a water-power site value constitutes a most complex engineering study under any circumstances and when the project is for public utility purposes the difficulties are magnified. This is because no tangible basis for comparison is offered. Any advantage of one site over another may not be capitalized by the developing public utility agency and, therefore, the value to the utility lies only in the more economical or reliable service it may be permitted to give the public. Under these circumstances it would appear that the four primary factors which will probably operate to limit, but not necessarily fix, the appraised value are the following:

1. Cost of power at load centers from alternate sources.
2. Present value of power at load centers.
3. Possibility of marketing power site with some other agency.
4. Value of lands for some other purpose than power development.

Section 5 of regulation 14 provides:

> When licenses are issued involving the use of tribal lands embraced within Indian reservations, the commission will fix a reasonable annual charge for the use thereof, based upon the commercial value of the land for the most profitable purpose for which suitable, including power development. The charge shall commence upon date license is issued.

It will be noted that the regulations contemplate specific consideration of the fourth factor noted above; but in the present case the value for any other purpose than water power, in so far as the Indian lands are concerned, may be dismissed from consideration. The Indian land bordering the lake shore will not be affected above the natural high-water level, and the very small area actually to be occupied by the project works below the lake outlet is confined to the precipitous canyon territory where there are no commercial values.

The third factor likewise is of little importance in this case. In many respects the Flathead Lake site is highly attractive but with the abundant supply of cheaply developed water power resources throughout the Northwest, it will probably be many years before the development of markets will progress to the point where the isolation of this site may be overcome and its full development warranted by some agency other than the public utility now serving that immediate territory.

It seems necessary, therefore, to relate the appraisal to the first two factors noted above. Factor No. 1, which contemplates comparison with an alternate source of power, has already been studied to a considerable extent by Mr. Henshaw. It appears that the most favorable alternate source for developing a block of power similar in quantity and characteristics to that possible at Flathead will be a combination of site C on the Missouri River and the reconstruction of the Canyon Ferry project. Site C would have to be built first in order to provide spare capacity for the system and thus allow the existing Canyon Ferry plant to be dismantled. The main elements of these two units are presented by Table 1 and a comparison with Flathead by Table 2. These are based mainly on Mr. Henshaw's data. On this rough basis of comparison a differential of $2.19 per horsepower in favor of Flathead is indicated before consideration of the Indian charge.

Mr. Cochrane stated (Tr. p. 2284) that under present schedules, approved by the State regulatory agency, energy is being wholesaled in large blocks at Anaconda for from $25 to $30 a horsepower and at Great Falls for somewhat less. On this basis of about 4 mills per kilowatt-hour at Anaconda and 1.5 mills transmission cost, including losses, it would appear that the Flathead output might be valued at around 2.5 mills switchboard without increasing present rates.

The estimated cost of the Flathead development is approximately $7,500,000, which seems fair, although in my judgment this figure is more likely to be exceeded than reduced. The annual charges, adopting the 12 per cent basis, will be about $900,000 a year. The company estimates somewhat more. At 2½ mills a kilowatt-hour the annual generation must reach 360,000,000 kilowatt-hours to offset the annual charge exclusive of any Indian rental. The site is capable of producing a great deal more, and the most specific basis for the charge will be a schedule which makes equitable division of revenue beyond costs between the Indians on the one hand and the public interests of the State on the other. Necessarily, such a schedule must incorporate various safeguards such as minimum charges, etc., which protect the Indian interests, but at the same time encourage the company to make the largest practicable utilization of the available resources.

An approximation of an equitable division of interest between the Indians and the public may be derived as follows: As Mr. Henshaw points out, a development confined exclusively to tribal lands and without artificial regulation of the lake might be made which would have a primary capacity of 37,440 horsepower (2,600 × 180 × 0.08). Ownership of the resources for such a project lies entirely with the Indian tribe. Constructed to 60,000 horsepower installed capacity, such a project would probably cost around $5,000,000.

From preliminary calculations and subject to correction by the detailed status check now being made by Mr. Orcutt, it appears that tribal lands affected by regulation of the lake itself will amount to about 25 per cent of the total. The division of interest in the entire project between Indian and public interest combining these various factors may be calculated as follows:

$$\frac{37,500}{80,000}=46.875 \text{ per cent (of project exclusively Indian).}$$

$$\frac{\$5,000,000}{37,500}=\$133 \text{ per horsepower (for project without regulation).}$$

$$\frac{\$2,500,000}{42,500}=\$59.80 \text{ per horsepower (for additional power from regulation).}$$

$$\frac{\$133}{\$59.8}=2.2 \text{ (ratio of value in favor of storage power).}$$

Indian interest:	
46.875×1	46.875
53.125×2.2×0.25	29.218
Indian total	76.093 = 46.5%
Public interest = 53.125×2.2×0.75	87.654 = 53.5%
Combined total	163.747 = 100 %

Such computation is by no means conclusive, but it serves as an indication of the comparative interests.

The schedule of Indian charge, attached hereto, aims to apply the principles outlined in the foregoing discussion. While merely tentative and probably embracing some defects, it should at least be helpful in offering something tangible for further study and discussion. The schedule embodies the principles which by long experience have been found most sound for power sale contracts and at the same time it disposes automatically of the questions of efficiency factors, utilization factors, etc., regarding which there has been considerable futile discussion in this case. It will be desirable, of course, that the charge be divided between a peak charge and an energy charge in order to prevent the plant being utilized primarily for peak and stand-by purposes. Also, certain substantial minimum rentals are provided to protect the Indian interests. A discount of the energy charge during the season of high flow might be suggested with the thought that by such means more complete utilization would be attained and consequently larger revenue obtained for the Indian fund than the minimum charges which otherwise may logically result. This feature, however, has been omitted in this presentation in order that the schedule may be kept as simple as practicable. It will be noted that the plan provides for no deduction from the Indian charge on account of energy that may be furnished to the irrigation district. The company will be required to pay the same charges on such energy as it does on the energy transmitted to Anaconda and elsewhere. On the whole, the plan appeals to me as being eminently fair not only to the Indians but also to the company and the consuming public.

The following tabulation illustrates the operation of the schedule for varying rates of production at 75 per cent load factor:

Output at rate of kilowatt hours per month	Equivalent average horsepower	Peak load charge	Annual charge energy	Total rental	Average per horsepower
30,000,000	55,074	$34,056.00		[1] $48,000.00	$0.87
35,000,000	64,253	41,100.00	$55,200.00	96,300.00	1.50
40,000,000	73,432	49,140.00	110,400.00	159,540.00	2.17
45,000,000	82,611	58,176.00	165,600.00	223,776.00	2.72
50,000,000	91,790	68,196.00	220,800.00	288,996.00	3.15
55,000,000	100,969	79,176.00	276,000.00	355,176.00	3.52
60,000,000	110,148	90,120.00	331,200.00	421,320.00	3.83

[1] Established by minimum charge of $4,000 per month during first 5 years and would be doubled in case this low output occurred after fifth year of operation.

A chart which offers ready means for estimating the charges under different conditions is attached hereto. It is of interest to note that the Indian revenue from operation at the rate of 50,000,000 kilowatt-hours a month which reasonably may be anticipated as the market and the site reach full development will amount to $289,000 a year. Capitalized at 6 per cent this represents a valuation of practically $5,000,000 for the Indian interest in the project.

F. E. BONNER,
Executive Secretary.

MR. BONNER'S PROPOSED SCHEDULE OF INDIAN CHARGE

The licensee shall pay into the United States Treasury as compensation for the use of Flathead Indian tribal lands (and administrative expenses of the United States) in connection with this license as annual charge for each calendar year subject to the following conditions:

A. The amount of the charge will be the sum of the 12 monthly charges each of which shall be calculated as follows:

(1) *Peak load charge.*—First 45,000 kilowatts or less of maximum load, $2,250 per month; next 15,000 kilowatts of maximum load, $0.06 per kilowatt; next 10,000 kilowatts of maximum load, $0.07 per kilowatt; next 10,000 kilowatts of maximum load, $0.08 per kilowatt; next 10,000 kilowatts of maximum load, $0.09 per kilowatt; all over 90,000 kilowatts of maximum load, $0.10 per kilowatt.

(2) *Energy charge* (to be added to demand charge): First 30,000,000 kilowatt-hours per month, no charge; all over 30,000,000 kilowatt-hours at following rates: First 400 kilowatt-hours per kilowatt of proportional peak load, $0.001 per kilowatt-hour; next 150 kilowatt-hours per kilowatt of proportional peak load, $0.0007 per kilowatt-hour; all over 550 kilowatt-hours per kilowatt of proportional peak load, $0.0004 per kilowatt-hour.

(3) *Minimum charge* will be $1,000 per month beginning with the month in which license is issued and extending to the month next preceding that within which the project is placed in commercial operation; thereafter the minimum charge (inclusive of the combined peak and energy charges) for each month shall be $4,000 per month until the beginning of the fifth calendar year after the date on which the project is placed in commercial operation; and thereafter the minimum monthly charge shall be $8,000 per month.

B. The licensee shall be required to install, operate, maintain, and periodically test such meters and other equipment as may be required for measuring, in terms of kilowatts of peak load and kilowatt-hours, the output of electric energy produced by the generating units of the plant, and representatives of the commission may at any time have the right to inspect and test such meters and other equipment in the presence of a representative of the licensee. The record of meter measurement shall be used as the basis of the charge calculations: *Provided, however,* That in case any installed meter shall during any period of time for any reason fail to register the output correctly the record of output for such period shall be estimated from the best data available.

C. Promptly after January 1 of each year the licensee shall forward to the commission a record of the peak load and total energy output for each month of the preceding calendar year. After such verification as may be deemed desirable by the commission this record will be made the basis of the annual charge and a statement rendered the licensee which shall be paid within 30 days of receipt.

D. For calculating the peak load charge the maximum load of each month will be considered as that average kilowatt output of the 30-minute interval in which the output of electric energy is greater than in any other 30-minute interval in the same month. For calculating the energy charge the proportional peak load will be derived by taking the proportion of the maximum load that the output for the month in excess of 30,000,000 kilowatt-hours bears to the total output for the month.

E. The annual charge may be readjusted at the end of 20 years after the beginning of operation under this license and at periods of not less than 10 years thereafter upon the basis used in the original determination and upon the facts as found by the commission at such times of readjustment.

SUGGESTED ARMY ENGINEERS' SCHEDULE

WAR DEPARTMENT,
Washington, February 27, 1930.

The SECRETARY OF THE INTERIOR.
Acting Chairman Federal Power Commission,
Department of the Interior, Washington, D. C.

DEAR MR. SECRETARY: 1. In response to your recent request for a recommendation on the amount which the Rocky Mountain Power Co. should pay to the Indian Bureau for flowage rights in connection with a license for the construction of a power plant on the Flathead River, you are advised that based on the data submitted I have had a study made under the direction of the Chief of Engineers, who advises that the conclusions of that study are as follows:

(*a*) That the revenue should be derived, first, from a fixed yearly demand charge, and second, from an energy charge, the latter to be sufficiently low to make it worth while for the company to generate as much power as can be absorbed in the system.

(*b*) That no unnecessary restrictions should be placed on the method of operating the plant by the power company, such as a peak load penalty, as it is believed that this will have the effect of reducing the usefulness of the plant and will not provide additional return to the Indian Bureau.

2. The following conditions are recommended as being fair to all parties concerned and are based on computations made from information supplied by your office:

Fixed charge: The power company shall pay to the Indian Bureau for the privileges granted under this license a fixed charge at the rate of $1,000 per month from the time that this license is issued until the time when the plant starts generating power for other than test purposes. As soon as the plant starts generating power for other than test purposes, the company shall pay at the rate of $60,000 per year until the beginning of the fifth calendar year, at which time the fixed charge shall be increased to $125,000 per year, and shall be continued until the expiration of this license, unless modified under the terms thereof.

Energy charge: In addition to the fixed charge, the company shall pay for energy generated as follows: For the first 420,000,000 kilowatt-hours per annum during the time that the fixed charge is $60,000 per annum, and for the first 475,000,000 kilowatt-hours per annum thereafter, no additional charge shall be made. For all energy generated over these amounts, the company shall pay at the rate of 1 mill per kilowatt-hour.

The energy shall be metered at the plant at generator voltage.

3. In arriving at the above recommendations, certain assumptions were made and certain figures were accepted, as follows:

Cost of development, not including transmission line, $8,000,000.
Installed capacity, 150,000 horsepower.
Regulated low flow 90 per cent of time, 5,400 second-feet.
Average head, 185 feet.
Over-all plant efficiency, 85 per cent.
Prime power capacity, based on 90 per cent time flow, 71,000 kilowatts.
Prime power output per annum with 100 per cent load factor, 622,000,000 kilowatt-hours.
Sale price of power delivered at end of transmission line, $25 per horsepower-year, or 3.83 mills per kilowatt-hour.
Cost of 2-circuit, 132,000-volt transmission line 140 miles long from plant to Anaconda, $3,000,000.

4. Based on the above data and the details of the cost as stated by the power company, it was computed that the total annual fixed and operating charges on the plant, not including the transmission line, would be approximately $1,000,000, divided as follows:

Interest at 7 per cent	$560, 000
Operation, maintenance, and overhead	200, 000
Taxes at 2 per cent	160, 000
Depreciation, 1 per cent	80, 000

5. In order to arrive at the net revenue at the plant, a transmission line loss in energy of 12 per cent was assumed, and fixed and operating charges of the transmission line were computed as follows:

Interest at 7 per cent	$210, 000
Depreciation at 1½ per cent	45, 000
Patrol at $100 per mile per year	14, 000
Maintenance and repairs at 0.5 per cent	15, 000
Taxes at 2 per cent	60, 000
Overhead and contingencies	6, 000
Total	350, 000

6. From the above computations, the curves shown on the attached sheet were drawn to show the difference between annual charges and the revenue derived from power generated.

7. It was considered that the fixed charge should be sufficiently large to protect the Indian Bureau in case the company desired to maintain the plant in a stand-by condition, but should also be low enough so that the power company could earn this charge under any foreseen condition. The lowest flow of record, occurring for 8 months during 1919 and 1920, gave a regulated flow under the assumed conditions of 0.62 cubic foot per second per square mile of drainage area. This flow corresponds to a 100 per cent prime power capacity of 57,000 kilowatts, or an output at the rate of 500,000,000 kilowatt-hours per year. It is to be expected that during a dry period of this character the load factor on a storage project of this kind would be at least 95 per cent, and is was therefore concluded that the company could produce under the worst conditions at least 475,000,000 kilowatt-hours per year or 76.4 per cent of the 90 per cent time flow output.

8. From the curve it will be seen that the difference between the cost of producting this amount of power and the revenue derived therefrom would be approximately $250,000. Obviously, all of this difference should not be credited to the Indian Bureau. In order to arrive at the proportion which should be so credited, the value of storage derived from the use of Indian lands was computed as follows:

The 90 per cent time unregulated flow corresponds to a prime power capacity of 33,300 kilowatts, or an output of 291,000,000 kilowatt-hours per annum. Using 76.4 per cent of this figure of 220,000,000 kilowatt-hours per annum as the minimum power which would be generated with a run of river plant, the revenue derived from the curve is shown to be $400,000. The cost of a run of river plant of this kind is estimated at $5,000,000, on which the fixed and operating charges were calculated to be $650,000 per annum. Therefore, with the minimum output mentioned above, there would be a net loss of $250,000. The effect of storage therefore is to convert a loss of $250,000 per year into a profit of $250,000 per year based on a minimum output, or in other words the value of storage is $500,000 per annum.

9. It is estimated that 25 per cent of the storage lands belong to the Indian Bureau and therefore the minimum amount which should accrue to the bureau is $125,000 per year, which is the recommended fixed charge.

10. In arriving at the recommendations for the energy charge, a figure was selected which would encourage the power company to generate as much power as could be sold, and thus insure the maximum return to the Indian Bureau.

Sincerely yours,

Patrick J. Hurley,
Secretary of War.

March 12, 1930.

Hon. B. K. Wheeler,
United States Senate.

My Dear Senator Wheeler: In response to your request when I appeared before the Senate Interstate Commerce Committee on March 5, I desire to assure you that the larger the development of the Flathead power site under the figures contained in the Army engineers' report the lower will be the estimated generating costs of current per kilowatt-hour.

I inclose two tables which set out, respectively, the approximate rentals and costs of current for the period before the fifth calendar year and for the period from the fifth year to the twentieth year when the rentals are subject to revaluation. These tables show the total rentals, the increasing rates per horsepower, and the decreasing estimated costs of current per kilowatt-hour.

From these tables it is easy to observe the basis for the Army engineers' statement that a schedule was recommended "which would encourage the power company to generate as much power as could be sold and thus insure the maximum return to the Indian Bureau." You will realize also that when the full installation has been made which both of the applicants have specified (viz, 150,000 horsepower) it will not be possible for either of them to obtain the needed current for their growth at as low a cost as one mill per kilowatt-hour through development elsewhere.

I also have your letter of the 6th, with inclosures from Mr. Walter H. Wheeler addressed to you and Senator Walsh, which I have noted and return herewith. Mr. Wheeler's figures do not readily convey the whole story of the Army engineers' recommended basis for Flathead Indian rentals.

As you are aware, the two propositions before the commission are entirely different and not directly comparable. One is an application for a license for and the prompt construction of the Flathead Lake storage and the upper power site at the foot of Flathead Lake. The other is for a preliminary permit granting the permittee the right to investigate during a period of three years the possibilities of the Flathead Lake storage, the upper power site at the foot of Flathead Lake and the four lower power sites on the Flathead River, with the option of applying for a license prior to the expiration of the permit, but with no obligation to apply for such license. The figures submitted by the Chief of Engineers, United States Army, show what he considers should be paid to the Indian Bureau for its interest in the Flathead Lake storage and the power site at the foot of Flathead Lake. The figures do not cover the four lower sites on Flathead River, nor can they be extended to apply to those sites. Neither of the applicants has the information on the physical conditions existing at the four lower sites to enable him to make even general estimates of the cost of development nor is such information in possession of the Government. Under these circumstances, you will appreciate, I think, that it is impossible at this time to fix upon a rental for the four lower sites with any degree of fairness to the Indians.

Mr. Wheeler bases the rental which he would pay for site No. 1 on an estimated average output of 105,000 horsepower, and that which the Rocky Mountain Power Co. would pay on 71,000 horsepower after the fifth year of operation. Obviously, the potential power of the site is the same in either case; the differences merely result from the judgment of the two applicants, and would not be realized in practice. The estimate of the engineers of the War Department assumes an average output of 95,000 horsepower, which seems more reasonable than estimated by either of the applicants.

For Senator Walsh's information, I am also sending him a copy of this letter.

Very sincerely,

RAY LYMAN WILBUR.

REVISION OF SUGGESTED ARMY ENGINEERS' SCHEDULE

WAR DEPARTMENT,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, March 29, 1930.

The EXECUTIVE SECRETARY FEDERAL POWER COMMISSION,
Department of the Interior, Washington, D. C.

DEAR SIR: 1. In accordance with your letter of March 26, 1930, Montana-Rocky Mountain Power Co., the estimate submitted by the Rocky Mountain Power Co. on the capital and annual cost of a transmission line proposed for the Flathead Lake project, has been reviewed.

2. It is considered that the costs as given by the Rocky Mountain Power Co. are higher than can be reasonably expected. An estimate based on such data as are available in this office has been made on a

double transmission line on wooden H-type supports, including a separate telephone line and a 100,000 kilovolt-ampere substation. The first cost of such a line, 140 miles long, and of the substation is estimated at $2,950,000. Annual fixed and operating charges, including interest at 7 per cent per annum, are estimated to be $369,000.

3. In the letter from the Secretary of War to the Secretary of the Interior, dated February 27, 1930, the fixed and operating charges on a double circuit line were given as $350,000. In view of the above increased cost of transmitting energy under the conditions outlined by the Rocky Mountain Power Co., the following modifications in the charges for flowage rights on the Indian lands as recommended in the letter referred to above are considered to be equitable:

(*a*) The fixed charge given as $60,000 per year should be reduced to $50,000 per year.

(*b*) The fixed charge given as $125,000 per year should be reduced to $120,000 per year.

(*c*) All other charges and conditions should remain as originally recommended.

4. A chart dated March 27, 1930, showing the difference between annual charges revised as above and the revenue derived at various rates of output, is inclosed.

Very truly yours,

Herbert Deakyne,
Brigadier General,
Acting Chief of Engineers.

Interpretation of Flathead Site No. 1, Army engineers' rental recommendations

UNTIL FIFTH CALENDAR YEAR

Capacity developed			Estimated generating cost per kilowatt-hour before rental [1]	Indian rental					Estimated generating cost per kilowatt-hour, including rental [1]
Horsepower	Kilowatts	Kilowatt-hours		Fixed charge	Energy charge	Total	Rate per horsepower	Rate per kilowatt	
			Mills						*Mills*
65, 000	48, 750	427, 050, 000	2. 42	$60, 000. 00	$7, 050. 00	$67, 050. 00	$1. 03	$1. 37	2. 56
70, 000	52, 500	459, 900, 000	2. 19	60, 000. 00	39, 900. 00	99, 900. 00	1. 43	1. 91	2. 41
75, 000	56, 250	492, 750, 000	2. 03	60, 000. 00	72, 750. 00	132, 750. 00	1. 77	2. 36	2. 30
80, 000	60, 000	525, 600, 000	1. 90	60, 000. 00	105, 600. 00	165, 600. 00	2. 07	2. 76	2. 22
85, 000	63, 750	558, 450, 000	1. 79	60, 000. 00	138, 450. 00	198, 450. 00	2. 33	3. 11	2. 15
90, 000	67, 500	591, 300, 000	1. 69	60, 000. 00	171, 300. 00	231, 300. 00	2. 57	3. 43	2. 08
95, 000	71, 250	624, 150, 000	1. 60	60, 000. 00	204, 150. 00	264, 150. 00	2. 78	3. 71	2. 02
100, 000	75, 000	657, 000, 000	1. 52	60, 000. 00	237, 000. 00	297, 000. 00	2. 97	3. 96	1. 97
105, 000	78, 750	689, 850, 000	1. 45	60, 000. 00	269, 850. 00	329, 850. 00	3. 14	4. 19	1. 93
110, 000	82, 500	722, 700, 000	1. 38	60, 000. 00	302, 700. 00	362, 700. 00	3. 29	4. 39	1. 88

FIFTH TO TWENTIETH YEAR

Horsepower	Kilowatts	Kilowatt-hours	Estimated generating cost per kilowatt-hour before rental [1]	Fixed charge	Energy charge	Total	Rate per horsepower	Rate per kilowatt	Estimated generating cost per kilowatt-hour, including rental [1]
65, 000	48, 750	427, 050, 000	2. 42	$125, 000	0	$125, 000	$1. 92	$2. 56	2. 71
70, 000	52, 500	459, 900, 000	2. 19	125, 000	0	125, 000	1. 78	2. 37	2. 46
75, 000	56, 250	492, 750, 000	2. 03	125, 000	$17, 750	142, 750	1. 90	2. 53	2. 32
80, 000	60, 000	525, 600, 000	1. 90	125, 000	50, 600	175, 600	2. 19	2. 92	2. 23
85, 000	63, 750	558, 450, 000	1. 79	125, 000	83, 450	208, 450	2. 45	3. 27	2. 16
90, 000	67, 500	591, 300, 000	1. 69	125, 000	116, 300	241, 300	2. 68	3. 57	2. 10
95, 000	71, 240	624, 150, 000	1. 60	125, 000	149, 150	274, 150	2. 89	3. 85	2. 04
100, 000	75, 000	657, 000, 000	1. 52	125, 000	182, 000	307, 000	3. 07	4. 09	1. 99
105, 000	78, 750	689, 850, 000	1. 45	125, 000	214, 850	339, 850	3. 23	4. 31	1. 94
110, 000	82, 500	722, 700, 000	1. 38	125, 000	247, 700	372, 700	3. 39	4. 53	1. 89

[1] Includes 7 per cent interest on $8,000,000 investment and 1 per cent interest for depreciation.

SUGGESTED INDIAN BUREAU'S SCHEDULE No. 2, APRIL 1, 1930

Flathead site No. 1.—Revised rental recommendations

FIFTH TO TWENTIETH YEAR

Horsepower	Capacity developed (kilowatt-hours at 6535)	Revenue at switch at $18 (2.75 mills)	Return to company—								Cost to company, including rental and 8 per cent return—				Indian rental			
			Based on $7,555,400 development cost				Based on $8,000,000 development cost				Based on $7,555,400		Based on $8,000,000					
			Operating charges[1]	Rentals	Return		Operating charges[2]	Rentals	Return		Amount	Per kilowatt-hour	Amount	Per kilowatt-hour	Fixed charge	Energy charge at 1¼ mills	Total	Per horsepower
					Amount	Per cent			Amount	Per cent								
												Mills		*Mills*				
60,000	392,100,000	$1,080,000	$352,662	$104,400	$622,938	8.24	$366,000	$104,400	$609,600	7.62	$1,061,494	2.71	$1,110,400	2.83	$104,400	....	$104,400	$1.74
65,000	424,775,000	1,170,000	352,662	104,400	712,938	9.44	366,000	104,400	699,600	8.74	1,061,494	2.50	1,110,400	2.61	104,400	....	104,400	1.60
68,000	444,380,000	1,224,000	352,662	104,400	766,938	10.15	366,000	104,400	753,600	9.42	1,061,494	2.39	1,110,400	2.49	104,400	....	104,400	1.53
70,000	457,450,000	1,260,000	352,662	121,212	786,126	10.40	366,000	121,212	772,788	9.66	1,078,306	2.36	1,127,212	2.46	104,400	$16,812	121,212	1.73
75,000	490,125,000	1,350,000	352,662	162,056	835,282	11.06	366,000	162,056	821,944	10.27	1,119,150	2.28	1,168,056	2.38	104,400	57,656	162,056	2.16
80,000	522,800,000	1,440,000	352,662	202,900	884,438	11.71	366,000	202,900	871,100	10.89	1,159,994	2.22	1,208,900	2.31	104,400	98,500	202,900	2.54
85,000	555,475,000	1,530,000	352,662	243,744	933,594	12.35	366,000	243,744	920,256	11.50	1,200,838	2.16	1,249,744	2.25	104,400	139,344	243,744	2.87
90,000	588,150,000	1,620,000	352,662	284,587	982,751	13.01	366,000	284,587	969,413	12.12	1,241,681	2.11	1,290,587	2.20	104,400	180,187	284,587	3.16
95,000	620,825,000	1,710,000	352,662	325,431	1,031,907	13.66	366,000	325,431	1,018,569	12.73	1,282,525	2.06	1,331,431	2.14	104,400	221,031	325,431	3.43
100,000	653,500,000	1,800,000	352,662	366,275	1,081,063	14.31	366,000	366,275	1,067,725	13.34	1,323,369	2.02	1,372,275	2.10	104,400	261,875	366,275	3.66
105,000	686,175,000	1,890,000	352,662	407,119	1,130,219	14.96	366,000	407,119	1,116,881	13.96	1,364,213	1.99	1,413,119	2.06	104,400	302,719	407,119	3.88
110,000	718,850,000	1,980,000	352,662	447,962	1,179,476	15.61	366,000	447,962	1,166,038	14.57	1,405,056	1.95	1,453,962	2.02	104,400	343,562	447,962	4.07

Minimum, at $8,700. Begin energy charge at 37,000,000 kilowatt-hours per month.

[1] Operation and maintenance, $63,000; overhead, $63,000; taxes, 2 per cent, $151,108; depreciation, 1 per cent, $75,554; total, $352,662.

[2] Operation and maintenance, $63,000; overhead, $63,000; taxes, 2 per cent, $160,000; depreciation, 1 per cent, $80,000; total, $366,000.

THE FEDERAL POWER COMMISSION LICENSE ON GOVERNMENT LANDS PROJECT NO. 5, MONTANA—ROCKY MOUNTAIN POWER CO.

Whereas by act of Congress, approved June 10, 1920 (41 Stat. 1063) designated therein as the Federal water power act and hereinafter called the act, the Federal Power Commission, hereinafter called the commission, is authorized and empowered, inter alia, to issue licenses for the purpose of constructing, operating, and maintaining dams, water conduits, reservoirs, power houses, transmission lines, or other project works necessary or convenient for the development, transmission, and utilization of power across, along, from or in any of the navigable waters of the United States, or upon any part of the public lands and reservations of the United States (including the Territories), or for the purpose of utilizing the surplus water or water power from any Government dam; and

Whereas by act of Congress, approved March 7, 1928 (45 Stat. pp. 212, 213), the commission was specifically authorized, in accordance with the Federal water power act and upon terms satisfactory to the Secretary of the Interior, to issue a permit or permits or a license or licenses for the use, for the development of power, of power sites on the Flathead Reservation and of water rights reserved or appropriated for the irrigation projects; and

Whereas Rocky Mountain Power Co., hereinafter called the licensee, a corporation organized and existing under the laws of the State of Delaware and having its office and principal place of business in the city of Butte, in the State of Montana, has made application in due and proper form to the commission for a license for a power project designated as project No. 5 on the records of the commission, and for authority to construct, maintain, and operate, in Flathead River and Flathead Lake, in the vicinity of Polson, in the counties of Flathead and Lake, State of Montana, certain project works, as hereinafter described, necessary or convenient for the development and improvement of navigation and for the development, transmission and utilization of power across, along, from and in navigable waters of the United States; and to occupy and use therefor certain public lands and reservations of the United States, as hereinafter described, together with all riparian rights appurtenant thereto which are necessary or useful for the purposes of the project; and water rights for power purposes reserved or appropriated for Indian irrigation projects; and

Whereas the licensee has submitted to the commission satisfactory evidence of its compliance with the laws of the State of Montana as required by section 9, subsection (b) of the act, and the commission is satisfied as to the ability of the licensee to carry out the plans for said project as filed with said application; and

Whereas notice of said application has been given and published by the commission, as required by section 4 of the act; full opportunity has been given to all interested parties to be heard, and no application for said project, or in conflict therewith, has been filed by any State or municipality; and

Whereas the maps, plans, and specifications of said project and of said project works, as hereinafter described, have been approved by the commission, and the plans of the dam and other structures affecting navigation have been approved by the Chief of Engineers and the

Acting Secretary of War; and the terms set forth in this license are satisfactory to the Secretary of the Interior as required by the act of March 7, 1928 (45 Stat., pp. 212, 213); and

Whereas all charges for defraying the expense of administering the provisions of the Federal water power act were waived by the provisions of the act of March 4, 1929 (45 Stat. 1640); and

Whereas the commission has found that said project, as hereinafter described, will be best adapted to a comprehensive scheme of improvement and utilization of said waterway for the purposes of navigation, of water-power development, and other beneficial public uses; and

Whereas the licensee on the 20th day of May, 1930, pursuant to an authorization of its board of directors, a copy of the record thereof being hereto attached, accepted in writing all the terms and conditions of the act and of this license:

Now, therefore, the commission hereby issues this license to the licensee for the purpose of constructing, operating, and maintaining certain project works necessary or convenient for the development and improvement of navigation and for the development, transmission, and utilization of power across, along, from, or in the Flathead River and Flathead Lake, navigable waters of the United States, and constituting a part of the project hereinafter described, said license, including the period thereof, being subject to all the terms and conditions of the act and of the rules and regulations of the commission pursuant thereto as amended and made effective on the 1st day of May, 1928, as though fully set forth herein, which said rules and regulations are attached hereto and made a part hereof, and being subject also to the following express conditions and limitations, to wit:

ARTICLE 1. This license is issued for a period of 50 years from the date hereof, and in consideration of such license and the benefits and advantages accruing thereunder to the licensee, it is expressly agreed by the licensee that the entire project, project area, and project works as hereinafter designated and described, whether or not located in, on, or along said Flathead River and Lake or upon lands of the United States, shall be subject to all the terms and conditions of this license, including the terms and conditions of the act and of the rules and regulations of the commission pursuant thereto and made a part of this license.

ART. 2. The project covered by and subject to this license is designated as Flathead site No. 1, is located partly on public lands and reservations of the United States and consists of—

A. All lands constituting the project area and inclosed, or the location of which is shown, by the project boundary, and/or interests in such lands necessary or useful for the purposes of the project, whether such lands or interests therein are owned or held by the licensee or by the United States; such project area and project boundary being more fully shown and described by certain exhibits which accompanied said application for license and which are designated and described as follows:

Exhibit J.—Map in one sheet, designated Flathead development general map (F. P. C. No. 5–1).

Exhibit K.—Map in four sheets, designated Flathead development project map (F. P. C. No. 5–4, 5, 6, 7).

Exhibits J and K.—Signed Rocky Mountain Power Co., by F. M. Kerr, vice president.

B. All project works consisting of a concrete dam in and across the Flathead River, about 4 miles below the outlet of Flathead Lake; a reservoir in said Flathead River and Lake; water conduits about 770 feet long, including an intake at the upper end of each such conduit; a power house and appurtenant equipment; such project works being more fully shown and described by certain exhibits which accompanied said application for license and which are designated and described as follows:

Exhibits J and K.—Cited above.

Exhibit L.—Map in two sheets, designated Flathead development general plan (F. P. C. No. 5–8) and Flathead development dam analysis (F. P. C. No. 5–9).

Exhibit M.—Four typewritten sheets, designated general description of plant and equipment, Flathead development.

Exhibits L and M.—Signed Rocky Mountain Power Co., by F. M. Kerr, vice president.

C. All other structures, fixtures, equipment, or facilities used or useful in the maintenance and operation of the project and located upon the project area, including such portable property as may be used and useful in connection with the project or any part thereof, whether located on or off the project area, if and to the extent that the inclusion of such property as a part of the project works is approved or acquiesced in by the commission; also all other rights, easements, or interests, the ownership, use, occupancy, or possession of which is necessary or appropriate in the maintenance and operation of the project or appurtenant to the project area.

ART. 3. The maps, plans, specifications, and statements designated and described in article 2 hereof as Exhibits J, K, L, and M, respectively, and approved by the executive secretary for the commission in accordance with its authorization of May 19, 1930, are hereby made a part of this license, and no substantial change shall hereafter be made in said exhibits, or any of them, until such change shall have been approved by the commission: *Provided, however,* That if the licensee deems it necessary or desirable that said approved maps, plans, specifications, and statements, or any of them, be changed, there shall be submitted to the commission for approval amended, supplemental, or additional maps, plans, specifications, and statements covering the proposed changes, and upon approval by the commission of such proposed changes such amended, supplemental, or additional maps, plans, specifications, and statements shall become a part of this license and shall supersede, in whole or in part, such map, plan, specification, or statement, or part thereof, theretofore made a part of this license as may be specified, respectively, in the order or indorsement of approval.

ART. 4. Said project works shall be constructed in substantial conformity with the approved maps, plans, and specifications thereof made a part of this license and designated and described in articles 2 and 3 hereof, or as changed in accordance with the provisions of said article 3. Except when emergency shall require for the protection of navigation, life, health, or property, no substantial alteration or addition not in conformity with the approved plans shall be made to any dam or other project works constructed under this license without the prior approval of the commission; and any emergency alteration or addition so made shall thereafter be subject to such modification and change as the commission shall direct. Minor changes in or divergence from such approved maps, plans, and specifications may be made in the course of construction, if such changes will not result in decrease in efficiency, in material increase in cost, or in impairment of the general scheme of development; but any such minor changes made without the prior approval of the commission which in its judgment have produced or will produce any of such results shall be subject to such alteration as the commission may direct.

ART. 5. The work of construction under this license, whether or not conducted upon lands of the United States, shall be subject to the inspection and approval of the district engineer, United States engineer office, Seattle, Wash., or of such other officer or agent as the commission may designate, who shall be the authorized representative of the commission for such purposes. The licensee shall notify such representative of the date upon which work will begin, and as far in advance thereof as said representative may reasonably specify, and shall notify him promptly in writing of any suspension of construction for a period of more than one week, and of its resumption and completion.

ART. 6. Subject to the provisions of section 13 of the act, the licensee shall begin the construction of said project works within one year from the date of issuance hereof, shall thereafter, in good faith and with due diligence, prosecute such construction, and shall within three years thereafter complete the installation of three units of not less than 150,000 horsepower aggregate capacity.

ART. 7. Upon the completion of the project works, or at such other time as the commission may direct, the licensee shall submit to the commission for approval revised maps, plans, specifications, and statements, in so far as necessary to show any divergence from or variations in the project area as finally located or in the project works as constructed when compared with the area shown and the works designated or described in this license or in the maps, plans, specifications, and statements approved by the commission under the provisions of article 3 hereof, together with a statement in writing setting forth the reasons which in the opinion of the licensee necessitated or justified variations in or divergence from the approved maps, plans, specifications, and statements. Such revised maps, plans, specifications, and statements shall, if and when approved by the commission, be made a part of this license and shall, to the extent and in the particulars set forth in the order or indorsement of approval, be substituted for the maps, plans, specifications and statements theretofore approved by the commission under the provisions of article 3 hereof. The maps finally approved by the commission and made a part of this license under the provisions of article 3 and/or 7 hereof shall show the project area to an adequate scale and the boundary thereof either by legal subdivisions, by metes and bounds survey, or by uniform offsets from center-line survey. Said project area shall include all lands without respect to ownership and whether or not the exact boundaries can be definitely fixed and determined, the use and occupancy of which are or will be valuable or serviceable in the maintenance and operation of the project; on which are located or to which are appurtenant the project works (other than portable property) and the rights, easements, or interests likewise valuable and serviceable; and the ownership or possession, or the right of use and occupancy, of which are subject to acquisition by the United States under the provisions of section 14 of the act. Said maps shall show the ownership of each parcel of land in said project area, and with respect to each parcel to which the licensee has not the fee title, the character of the right of use and occupancy possessed by the licensee together with the term of such right.

ART. 8. For the purpose of determining the stage and flow of the stream or streams from which water is to be diverted for the operation of said project works and of the amount of water held in and drawn from storage, the licensee shall install, as soon as practicable and thereafter maintain standard recording gages in Flathead Lake at the northern and southern ends, on Flathead River below the power plant, and on the principal streams tributary to Flathead Lake; and shall provide for the required readings of such gages and for the adequate rating of said station or stations. The licensee shall also install and maintain standard meters adequate for the determination of the amount of electric energy generated by said project works. The number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof may be altered from time to time if necessary to secure adequate determinations, but such alteration shall not be made except with the approval of the commission or its authorized representative or upon the specific direction of the commission. The installation of gages, the ratings of said stream or streams, and the determination of the flow thereof, shall be under the supervision of or in cooperation with the district engineer of the United States Geological Survey having charge of stream gaging operations in the region of said project, and the licensee shall advance to the said United States Geological Survey the amounts estimated to be necessary for such supervision or cooperation for such periods as may be mutually agreed upon. The licensee shall keep accurate and sufficient records of the foregoing determinations to the satisfaction of the commission, shall make return of such records annually, at such time and in such form as the commission may prescribe.

ART. 9. The licensee shall be liable for all damages occasioned to the property of others, including lands allotted in severalty to the Indians, by the construction, maintenance, or operation of said project works, or of the works appurtenant or accessory thereto, and in no event shall the United States be liable therefor; nor does this license guarantee the validity of any reservations contained in the patent to any allottee or other grantee of Indian lands, whether in trust or in fee.

ART. 10. In the construction and maintenance of the project works herein specified, the licensee shall place and maintain suitable structures to reduce to a reasonable degree the liability of contact between its transmission lines and telegraph, telephone, and other signal wires or power transmission lines not owned by the licensee, and shall also place and maintain suitable structures and devices to reduce to a reasonable degree the liability of any structures or wires falling and obstructing traffic and endangering life on highways, streets, or railroads.

ART. 11. The licensee shall allow officers and employees of the United States free and unrestricted access in, through, and across the said project and project works in the performance of their official duties.

ART. 12. The licensee shall be liable for injury to, or destruction of, any buildings, bridges, roads, trails, lands (except lands referred to in other provisions of this license), or other similar property of the United States, occasioned by the construction, maintenance, or operation of the project works or of the works appurtenant or accessory thereto constructed under the license. Arrangements to meet such liability either by compensation for such injury or destruction, reconstruction, or repair of damaged property, or otherwise, shall be made with the appropriate department or agency of the United States.

ART. 13. Timber upon public lands and reservations of the United States, to be used or destroyed in the construction of the project works, shall be paid for in accordance with the requirements and estimates of the department concerned.

ART. 14. The licensee shall, before placing any transmission line into operation, make provision satisfactory to the commission for avoiding inductive interference between such transmission line and any existing telephone line or lines of the United States, or with any such line or lines for which location has been made and specifications prepared but upon which construction has not begun at the time of erection of said transmission line. Such provisions may be applied either to the transmission line or to the telephone line or to both, as may be determined upon the basis of least cost. The licensee hereby agrees to assent to such changes in the location or design of any of its transmission lines as may in the opinion of the commission be necessary or desirable in order to avoid inductive interference with any telephone line or lines of the United States hereafter constructed or proposed to be constructed, provided such changes are made at the expense of the United States.

ART. 15. The licensee shall clear off all trees, logs, brush, or other débris, up to elevation 2,893, the margins of Flathead Lake and those portions of Flathead River which shall be used for reservoir purposes under this license, and shall dispose to the satisfaction of the commission, or its designated representative, of all the brush and débris resulting from such clearing, together with all temporary structures and refuse left on public lands and reservations of the United States from the construction and maintenance of said project works. In addition, the licensee shall cut and remove any trees or brush lying above elevation 2,893 which may be killed due to the regulation of Flathead Lake for storage purposes.

ART. 16. The licensee shall permit the use of any reservoir included in the project for the temporary storage or for the transportation of logs, ties, poles, lumber, or other forest products: *Provided*, That the use of said reservoir by owners of such logs, ties, poles, lumber, or other forest products, shall be under such rules and regulations adopted by the licensee as may be approved by the Secretary of Agriculture.

ART. 17. The licensee will interpose no objections to, and will in no way prevent, the use of water for domestic purposes by persons or corporations occupying public lands and reservations of the United States under permit along or near any stream or body of water, natural or artificial, used by the licensee in the operation of the project works covered by this license.

ART. 18. The licensee hereby recognizes the right of the United States to pump from the Flathead Lake or from Flathead River above licensee's dam for all purposes of irrigation on the Flathead irrigation project or the lands of the Flathead Reservation whether included in the irrigation project or not, not more than 50,000 acre-feet of water after July 15, of any one year.

ART. 19. The licensee shall do everything reasonably within its power and shall require its employees, contractors, and employees of contractors to do everything reasonably within their power, both independently and upon request of officers of the Forest Service, or other agents of the United States, to prevent and suppress fires on or near the lands to be occupied under this license.

ART. 20. Whenever the United States shall desire to construct, complete, or improve navigation facilities the licensee shall convey to the United States, free of cost, such of its lands and its rights of way and such right of passage through its dam or other structures, and permit such control of pools as may reasonably be required to construct, maintain, and operate such navigation facilities.

ART. 21. The operations of the licensee, in so far as they affect the use, storage, and discharge from storage of the water of Flathead Lake, shall at all times be controlled by such reasonable rules and regulations as the Secretary of War may prescribe in the interests of navigation, and as the Federal Power Commission may prescribe in the interests of flood control and of the fullest practicable utilization of the waters of Flathead River and Clark Fork for power, irrigation, and other beneficial public uses.

ART. 22. The licensee agrees that all rights acquired in connection with the project covered by this license and the use of water for the development of power shall be held subject to the rights which may be reasonably necessary for the complete development of the irrigable land, the domestic water supply requirements, and the water-power possibilities, in the watershed above the project works. The licensee further agrees to waive objections to the subtraction of such water up to a maximum flow of 200 cubic feet per second, as may be authorized under either Federal or State authority for diversion out of the watershed above the project works.

ART. 23. The licensee may regulate Flathead Lake between elevations 2,883 and 2,893; *Provided, however,* That the commission retains the right, at any time prior to the beginning of commercial operation of the project, to define limits of such regulation between elevations 2,880 and 2,893 in such manner as will make not less than 1,100,000 acre-feet of storage capacity available to the licensee, it being expressly understood that licensee shall not be restricted to less than 10 feet between the minimum and maximum elevations within which to carry on its regulations of Flathead Lake. It is expressly understood that variation by the commission of any limits of regulation which may be fixed as aforesaid, shall not affect the rentals provided for in article 30 hereof. It is expressly understood that if and when water is pumped from Flathead Lake or from Flathead River above licensee's dam after July 15, in any year, for purposes of irrigation as provided in article 18 hereof, the licensee shall be permitted, in the months of January, February, and March, of the next succeeding year, to regulate Flathead Lake, below the minimum elevation which may be fixed as aforesaid, to the extent necessary to enable it to recover the amount of water so pumped for irrigation purposes. Said elevations are in feet above mean sea level as determined by reference to a certain United States Geological Survey bench mark, elevation 2,910.882 feet, stamped "2900 GN," as now located and established at Somers, Flathead County, or to such other bench marks as may be established by the United States Geological Survey having the same datum. As a basis of determination of the aforesaid storage limits, the licensee shall complete the mapping of lands bordering Flathead Lake and River and of the lake bed between elevations 2,878 and 2,900 uniform with the maps already completed by the Geological Survey at the north end of the lake, and shall continue to finance the collection of records of ground water elevations in the area at the head of Flathead Lake, and the study and interpretation of such records. The licensee also agrees to perform such channel excavation and other work as may reasonably be required by the commission for the purpose of flood control to the end that the normal flood levels of Flathead Lake shall not be increased by reason of the installation of the project works, and for the purpose of full utilization of storage and navigation.

Art. 24. In consideration of the use to be made of the partially completed Newell Tunnel, the licensee shall pay into the Treasury of the United States the sum of $101,685.11, such payment to be made within nine months from and after the date of this license and to be a part of and included in the licensee's net investment in the project.

Art. 25. For the purpose of preventing the entrance of fish into the turbines of the power plant, the licensee shall install and maintain such fish stops or other equipment as may reasonably be prescribed by the Secretary of Commerce.

Art. 26. Coincident with the beginning of commercial operation of the project works and thereafter throughout the remainder of the term of the license, licensee shall make available, at the project boundary at or near the licensee's generating station, and the United States, for and on behalf of the Flathead irrigation project or the Flathead irrigation district, may take and, having taken, shall pay for, at the price of 1 mill per kilowatt-hour: (1) Electrical energy in an amount not exceeding 5,000 horsepower of demand to be used exclusively for pumping water for irrigation; and (2) electrical energy in an amount not exceeding 5,000 horsepower of demand for all project and farm uses and for resale. Such deliveries shall be made at such standard voltage as may be selected by the commission. The licensee shall also make available, at the voltage of the line from which service is taken, either at the project boundary at or near the licensee's generating station or at some more convenient place on the project to be agreed upon, and the United States, for and on behalf of the Flathead irrigation project or the Flathead irrigation district, may take and, having taken, shall pay for, at the price of 2½ mills per kilowatt-hour, additional electrical energy in an amount not exceeding 5,000 horsepower of demand for all project and farm uses and for resale.

Art. 27. The licensee shall, during the period of construction, deliver at line voltage and at a point to be agreed upon on the line or lines which it will construct to supply power for construction purposes, power for farm and project purposes on the Flathead irrigation project or the Flathead irrigation district in quantities required by the United States for said purposes up to a maximum demand of 500 horsepower, at the price of 2½ mills per kilowatt-hour.

ART. 28. The United States reserves to itself or to the Flathead irrigation project management the exclusive right to sell power within the boundaries of the Flathead Indian Reservation, to the extent of 10,000 horsepower to be delivered for use and/or sale as provided in article 26 hereof.

ART. 29. The licensee shall pay to the United States reasonable annual charges for recompensing it for the use, occupancy, and enjoyment of public and reserved lands (not including Indian tribal lands) or other property hereinbefore described. The payment by the licensee of such annual charges for any calendar year shall be made to the United States at the end of the year, or within 30 days thereafter, upon bills rendered or approved by the commission. Such charges shall be determined in accordance with the provisions of regulation 14 of said rules and regulations of the commission, and for the purposes of such determination the prime power capacity of the project shall be taken as 80,000 horsepower.

ART. 30. (A) The licensee shall pay into the United States Treasury as compensation for the use, in connection with this license, of the Flathead Indian tribal lands annual charges computed as follows:

(1) A charge at the rate of $1,000 per calendar month beginning with the month in which the license is issued and extending to and including the month in which the project is placed in commercial operation. For the purpose of the payments under this article, the beginning of commercial operation shall be considered as the time when one of the licensee's generating units shall have been installed, tested, and demonstrated to be in suitable condition to produce electric energy for commercial purposes with a reasonable degree of reliability.

(2) A charge at the rate of $5,000 per month beginning with the calendar month next succeeding the date on which the project is placed in commercial operation and extending to the end of the calendar year in which such commercial operation shall commence.

(3) For each full calendar year from and after the 1st of January next following the date on which the first unit is placed in commercial operation, annual charges will be as follows:

	Per year
For the first two years	$60, 000
For the third year	75, 000
For the fourth year	100, 000
For the fifth year	125, 000
For the next five years	150, 000
For the next five years	160, 000
For the next five years and/or until readjustment of the annual charges payable hereunder shall have been effected pursuant to the provisions of paragraph (D) of this article 30	175, 000

(B) Payments shall be made for each calendar year within 30 days after the close thereof on bills rendered by the commission.

(C) Pursuant to the provisions of the act of March 4, 1929 (45 Stat. 1640), all charges for reimbursing the United States for the cost of administration of the Federal water power act have been and are hereby expressly waived.

(D) The annual charges payable under this license may be readjusted at the end of 20 years after the beginning of operation under this license and at periods of not less than 10 years thereafter by mutual agreement between the commission and the licensee, with the approval of the Secretary of the Interior. In case the licensee, the commission, and the Secretary of the Interior can not agree upon the readjustment of such charges, it is hereby agreed that the fixing of readjusted charges shall be submitted to arbitration in the manner provided for in the United States arbitration act (U. S. C., title 9), such readjusted annual charges to be reasonable charges fixed upon the basis provided in section 5 of regulation 14 of the commission, to wit, upon the commercial value of the tribal lands involved, for the most profitable purpose for which suitable, including power development.

ART. 31. The licensee having submitted a claim of prelicense cost to January 31, 1929, of $183,312.47 and the solicitor of the commission having recommended the rejection of items contained therein aggregating a total of $85,088.76, the commission and the licensee hereby mutually agree that the sum of $98,223.71 shall be entered upon the fixed capital accounts of said project and included in the statement to be submitted to the commission, in accordance with the provisions of article 32 hereof as representing the actual legitimate investment in said project up to and including January 31, 1929: *Provided however*, That this agreement shall not deny or affect the licensee's right, within one year from and after the date of this license, to submit further evidence to the commission or to any court having jurisdiction for the purpose of establishing the propriety of any part of said $85,088.76.

ART. 32. Upon the completion of the construction of said project or of each of the separable parts thereof for which dates of completion are specified in article 6 hereof, or of any addition to or betterment of said project, the licensee shall file with the commission a statement under oath in duplicate showing the actual legitimate cost of construction thereof and the price paid for water rights, lands, or interest in lands appurtenant to such construction as required by regulation 20, section 2, of said rules and regulations of the commission. Any such statement shall include all proper and legitimate costs, whether incurred prior to issuance of license or on and after such date; and the licensee shall, if requested by the commission, show separately on any such statement, or on a special report or reports, the items and amounts of cost incurred prior to date of issuance of license, with such other details as the commission may require. Each and every item of cost included in any such statement shall be supported by proper voucher or other evidence; and any such voucher or evidence or certified copy thereof, in support of any item properly includable in said cost shall become a part of the permanent records of said project and shall be kept and retained by the licensee in the manner required by the commission. Any statement or report submitted to the commission under the provisions of this article shall be subject to the provisions of section 6 of said regulation 20.

ART. 33. Whenever the licensee is directly benefited by the construction work of another licensee, a permittee, or of the United States of a storage reservoir or other headwater improvement, the licensee shall reimburse the owner of such reservoir or other improvement for such part of the annual charges for interest, maintenance, and depreciation thereon as the commission may deem equitable. The proportion of such charges to be paid by the licensee shall be determined from time to time by the commission. Whenever such reservoir or other improvement is constructed by the United States the licensee shall pay similar charges into the Treasury of the United States upon bills rendered by the commission.

ART. 34. After the first 20 years of operation of said project under this license, out of surplus earned thereafter, if any, accumulated in excess of a specified reasonable rate of return upon the actual, legitimate investment of the licensee in said project, all as defined in and determined by the provisions of regulation 17 of said rules and regulations of the commission, the licensee shall establish and maintain amortization reserves, which reserves shall, in the discretion of the commission, be held until the termination of the license or be applied from time to time in reduction of the net investment. Such specified rate of return shall, subject to the proviso of paragraph A, section 3, of said regulation, be one and one-half times the weighted average annual interest rate payable on the par value of the bona fide interest-bearing debt of the licensee actually outstanding, in whole or in part, on account of project property at the beginning of the period of amortization and of each calendar year thereafter; such weighted average annual interest rate being determined as provided in paragraphs B and C of section 3 of said regulation 17: *Provided*, That if at the beginning of the period of amortization or of any calendar year thereafter the outstanding interest-bearing debt of the licensee on account of the project or projects under license, together with any other works or property operated in connection therewith, is less than 25 per cent of the actual, legitimate investment of the licensee in said project or projects, then and in such event for the calendar year next following the specified rate of return shall be two times the legal rate of interest in the State in which the project or major part thereof is located.

Subject to the provisions of section 6 of said regulation, the following proportions of such surplus earnings shall be paid into and held in such amortization reserves: Of all surplus earnings up to and including 2 per cent upon the actual, legitimate investment, 30 per cent thereof shall be so paid; of all surplus earnings in excess of 2 per cent and not in excess of 4 per cent upon such investment, 50 per cent thereof shall be so paid; of all surplus earnings in excess of 4 per cent and not in excess of 6 per cent, 70 per cent thereof shall be so paid, and of all surplus earnings in excess of 6 per cent, 90 per cent thereof shall be so paid: *Provided*, That if at the end of any calendar year of the amortization period the commission shall find that the accumulated earnings of the licensee during the period of operation, including the first 20 years thereof, have not yielded a fair return upon the actual, legitimate investment in the project or projects under license, the proportion of such surplus earnings for such calendar year and for succeeding calendar years to be paid into such amortization reserves shall be 10 per cent thereof until such time as the accumulated earnings of the licensee represent, in the judgment of the commission, a fair return upon such investment for such period of operation.

ART. 35. No lease of said project or part thereof whereby the lessee is granted the exclusive occupancy, possession, or use of project works for purposes of generating, transmitting, or distributing power shall be made without the prior written approval of the commission; and the commission may, if in its judgment the situation warrants, require that all the conditions of this license, of the act, and of said rules and regulations of the commission shall be applicable to such lease and to such property so leased to the same extent as if the lessee were the licensee hereunder: *Provided*, That the provisions of this article shall not apply to parts of the project or project works which may be used by another jointly with the licensee under a contract or agreement whereby the licensee retains the occupancy, possession, and control of the property so used and receives adequate consideration for such joint use, or to leases of land while not required for purposes of generating, transmitting, or distributing power, or to buildings or other property not built or used for said purposes, or to minor parts of the project or project works the leasing of which will not interfere with the usefulness or efficient operation of the project by the licensee for said purposes. The licensee agrees that it will continue its separate corporate existence under the regulations of the Federal Power Commission, and that it will not enter into any merger with any other corporation or individual without the approval of the Federal Power Commission, previously obtained.

ART. 36. The licensee agrees that it will enter into a contract with the Montana Power Co. under which all electrical power or energy generated by the project covered by this license, except that delivered to or reserved for the United States pursuant to the provisions of this license, shall be delivered to or made available for said the Montana Power Co. or its nominee upon the payment to the licensee of an annual amount approximately sufficient to meet the operating expenses and maintenance costs, taxes, accruals for depreciation, and rentals (including the rental charges provided for by this license) and in addition an average return of 8 per cent per annum on its actual legitimate investment in all facilities and property covered by this license and used in the generation and delivery of such power, as established under the provisions of the Federal water power act and the rules and regulations of the commission issued in pursuance thereof. A duly certified copy of said power contract shall be filed with the commission.

ART. 37. It is hereby understood and agreed that the licensee, its successors and assigns will, during the period of this license, retain the possession of all project property covered by this license as issued or as hereafter amended, including the project area, the project works, and all franchises, easements, water rights, and rights of occupancy and use; and that none of such properties valuable and serviceable to the project and to the development, transmission, and distribution of power therefrom will be voluntarily sold, transferred, abandoned, or otherwise disposed of without the approval of the commission: *Provided*, That a mortgage or trust deed or judicial sales made thereunder, or tax sales, shall not be deemed voluntary transfers within the meaning of this article. The licensee further agrees, on behalf of itself, its successors and assigns, that, in the event said project is taken over by the United States upon the termination of this license, as provided in section 14 of the act, or is transferred to a new licensee under the provisions of section 15 of the act, it will be responsible for and will make good any defect of title to or of right of user in any such project property which is necessary or appropriate or valuable and serviceable in the maintenance and operation of the project, and will pay and discharge or will assume responsibility for payment and discharge of all liens or incumbrances upon said project or project property created by said licensee or created or incurred after the issuance of this license: *Provided*, That the provisions of this article are not intended to prevent the abandonment or the retirement from service of structures, equipment, or other project works in connection with replacements thereof when they become obsolete, inadequate, or inefficient for further service due to wear and tear, or to require the licensee for the purpose of transferring the project to the United States or to a new licensee to acquire any different title or right of user in any such project property than was necessary to acquire for its own purposes as licensee.

ART. 38. The licensee shall abide by such reasonable regulation of the services to be rendered to customers or consumers of power, and of rates and charges of payment therefor, as may from time to time be prescribed by any duly constituted agency of the State in which the service is rendered or the rate charged; and in case of the development, transmission, distribution, sale or use of power in public service by the licensee or by its customers engaged in public service within a State which has not authorized and empowered a commission or other agency or agencies within said State to regulate and control the services to be rendered by the licensee or by its customers engaged in public service, or the rates and charges of payment therefor, or the amount or character of securities to be issued by any of said parties, it is agreed as a condition of this license that jurisdiction is hereby conferred upon the commission, upon complaint of any person aggrieved or upon its own initiative, to exercise such regulation and control until such time as the State shall have provided a commission or other authority for such regulation and control: *Provided*, That the jurisdiction of the commission shall cease and determine as to each specific matter of regulation and control prescribed in this article as soon as the State shall have provided a commission or other authority for the regulation and control of that specific matter.

ART. 39. The licensee agrees that its securities shall be issued only (1) to the Montana Power Co. upon condition that they shall be retained by said the Montana Power Co., it being understood that none of such securities shall be disposed of by said the Montana Power Co. (except to a trustee or trustees under one of its mortgages or deeds of trust as hereinafter provided) without the express approval of the Commission previously had and obtained, and/or (2) to a trustee or trustees under any mortgage or deed of trust securing the issuance of bonds or other securities of said the Montana Power Co., to be held subject to the provisions of such mortgage or deed of trust. Such securities shall be sold to the Montana Power Co. for cash or its equivalent.

ART. 40. The licensee agrees that full and complete copies of rate schedules and all contracts of the licensee or of the Montana Power

Co. for management and supervision of its or their affairs, or for general construction, which involve the licensee or the project covered by this license, shall be filed with the Federal Power Commission promptly after execution. The licensee agrees to file annually with the Federal Power Commission copies of its annual reports and also copies of the Montana Power Co.'s annual reports as rendered to the Montana Public Service Commission.

ART. 41. With the written consent of the licensee, the commission may by order made under its seal, and after the public notice required by section 6 of the act, modify, alter, enlarge, or omit, in so far as authorized by law, any one or more of the conditions or provisions of this license; provided, however, that any such change in the terms of this license that may affect the interests of the Flathead Indians shall also be subject to approval by the Secretary of the Interior.

ART. 42. The enumeration herein of any rights reserved to the United States or to any State or municipality under the act, or of any requirements of the act, or of said rules and regulations of the commission shall not be construed in any degree as impairing any other rights so reserved by the act or as limiting the force of any other requirement of said act or of said regulations.

In witness whereof the Federal Power Commission has caused its name and seal to be hereto signed and affixed by its executive secretary, F. E. Bonner, this 23d day of May, 1930, pursuant to authority given at its meeting of May 19, 1930, a certified copy of the record thereof being hereto attached.

FEDERAL POWER COMMISSION,
By F. E. BONNER, *Executive Secretary.*

Approved May 23, 1930:

RAY LYMAN WILBUR,
Secretary of the Interior.

In testimony of acceptance of all the terms and conditions of the Federal water power act of June 10, 1920, and of the further conditions imposed in the foregoing license, the licensee, this 20th day of May, 1930, has caused its name and corporate seal to be hereto signed and affixed by John D. Ryan, its president, pursuant to a resolution of its board of directors, passed on the 20th day of May, 1930, a certified copy of the record thereof being hereto attached.

ROCKY MOUNTAIN POWER CO.,
By JOHN D. RYAN, *President.*

Attest:

J. F. DENISON, *Secretary.*

In consideration of the benefits to accrue to the Montana Power Co., a corporation organized and existing under the laws of the State of New Jersey, from the operation of the project which is the subject of the foregoing license, said the Montana Power Co., hereunto duly authorized by resolution of its board of directors, a certified copy of which is hereto attached, hereby guarantees the full performance by Rocky Mountain Power Co., licensee thereunder, of all the terms and conditions of article 6 of said license relating to the commencement of construction of the project works, to the due prosecution of such construction, and to the completion of the installation of three units of not less than 150,000 horsepower aggregate capacity, all as provided in said license. The undersigned company further agrees that it will enter into a power contract with said licensee as provided for in article 36 of said license.

MONTANA POWER CO.,
By FRANK SILLIMAN, Jr., *Vice President.*

Attest:

J. F. DENISON, *Secretary.*

Approved and accepted this 23d day of May, 1930.

FEDERAL POWER COMMISSION,
By F. E. BONNER, *Executive Secretary.*

Approved May 23, 1930:

RAY LYMAN WILBUR,
Secretary of the Interior.

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July 5, 1985

The Honorable Frank H. Murkowski
Chairman of the Subcommittee on
Water and Power
Committee on Energy and Natural
Resources
United States Senate
212 Senate Hart Office Building
Washington, D.C. 20510

Re: S. 403 and S. 426 -
Hydroelectric Project Relicensing

Dear Senator Murkowski:

This letter is written on behalf of the City of Escondido, California and the Escondido Mutual Water Company, who respectfully request that their concerns be taken into account by the Subcommittee on Water and Power in its consideration of S.403 and S. 426 and related legislation amending the relicensing provisions of the Federal Power Act of 1920. They also request that this letter be included in the record of the hearings on S. 403 and S. 426.

The City of Escondido is a municipal corporation located in northern San Diego County, California. The Escondido Mutual Water Company is a non-profit corporation which historically has supplied water to its shareholders in the Escondido area. The City of Escondido is Mutual's largest shareholder and since 1972, through a tender offer and Operating Agreement, the City Council of the City of Escondido has constituted five of the seven members of Mutual's Board of Directors.

In 1924 Mutual was issued a fifty year license for Federal Power Project 176. Certain project works and rights of way occupy small portions of the La Jolla, Rincon and San Pasqual Indian Reservations. In 1971 Mutual applied for a new fifty year license to operate its project. In 1978 the City of Escondido joined in Mutual's application. Meanwhile, the La Jolla, Rincon and San Pasqual Bands had intervened and filed a competing application seeking a nonpower license. The Secretary of the Interior in his capacity as trustee for the Indian Bands recommended federal takeover, or alternatively, supported the Bands' application. In 1972 the Federal Power Commission commenced investigating the extent to which Vista Irrigation District, another municipal corporation, was also involved in the operation of Project 176.

In 1979 after some fifty-two days of hearings in what was its first contested relicensing proceeding, the Commission ruled that the new license should be granted jointly to Mutual, the City of Escondido and Vista Irrigation District.

On appeal, the Ninth Circuit reversed, ruling that the license could not issue without the Bands' consent to the use of the reservation lands. The United States Supreme Court granted certiorari and reversed, ruling that the Federal Power Act gave the Commission authority to license the use of reservation land. Escondido Mutual Water Co. v. La Jolla et al. Bands of Mission Indians, ___ U.S. ___, 80 L.Ed.2d 753, 104 S. Ct. 2105 (1984). The case has now been remanded for further proceedings in accord with the Supreme Court decision, including a determination of reasonable terms and conditions for the use of these reservations.

The same parties are also involved in a related water rights case pending before the federal District Court for the Southern District of California. That case, filed in June 1969, is presently set for trial in November 1985.

On June 14, 1985, in an attempt to resolve all these disputes, the attorneys for the parties reached an agreement in principle. This agreement has not yet been ratified by all parties and will undoubtedly require Congressional confirmation.

On June 23, 1985, the attorney for the Indian Bands wrote you to express their opposition to S. 403 and S. 426 and stated that "any changes in the relicensing provisions of the Federal Power Act ... could undercut the settlement and cause it to be unraveled."

This letter is to inform you that my clients do not agree with the Bands' position on S. 403 and S. 426. The proposed legislation will have no effect on the proposed settlement. Contrary to the Bands' implication, concern about the Bands' ability "to compete for the license" has never been a serious factor in the settlement negotiations. In fact, it is likely that the proposed legislation will have no effect on the relicensing proceedings. In 1979 the Commission rejected the Bands' nonpower license application after a full and fair hearing, and there is no reason to believe that on remand the Bands' application will fare any differently. Similarly, any proposed changes to the "net investment" provisions are not pertinent since it is likely that the Commission will again offer the license to the current licensee. Therefore, there is no need for any of the "savings provisions" which the Bands suggested.

Furthermore, the suggestion that a savings provision exempting projects within Indian reservations would have limited effect is misleading. In Escondido, supra, the Bands made a similar argument contending that the United States Supreme Court should deny certiorari because the Ninth Circuit's ruling would only affect eight power projects. Attached is an excerpt from Petitioner's Reply Brief which discussed the same 1972 report relied upon by the Bands in their June 23 letter and pointed out that in fact Indians are involved with many more projects. The United States Supreme Court apparently agreed because it granted certiorari and reversed the Ninth Circuit decision.

Under the circumstances, the City of Escondido and the Escondido Mutual Water Company respectfully request that you and your committee ignore the Bands' June 23, 1985 letter and base your decision on the wisdom of the proposed legislation on its own merits.

Sincerely,

Don Lincoln

DONALD R. LINCOLN

DRL/ldj

cc: The Honorable Mark O. Hatfield
The Honorable Daniel J. Evans
The Honorable Don Nickels
The Honorable Bill Bradley
The Honorable Wendell H. Ford
The Honorable Howard Metzenbaum

The Honorable Alan Cranston,
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Filed
9/24/83

No. 82-2056
IN THE
Supreme Court of the United States

October Term, 1982

ESCONDIDO MUTUAL WATER COMPANY, CITY OF ESCONDIDO and VISTA IRRIGATION DISTRICT,
Petitioners,
vs.
LA JOLLA, RINCON, SAN PASQUAL, PAUMA and PALA BANDS OF MISSION INDIANS, and THE SECRETARY OF INTERIOR in his Capacity as Trustee for said Bands,
Respondents.

ON PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT.

PETITIONERS' REPLY BRIEF.

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ARGUMENT.

I.

The Decision Below Affects Many Hydroelectric Projects.

The Bands attempt to minimize the impact of the Ninth Circuit decision by stating that only eight power projects "are located on Indian lands or adversely affect Indian water rights." (Bands' Opp. at 21.)

The Bands' reliance on a 1972 letter is misplaced. The letter, which listed eight projects[2] occupying Indian tribal lands or affecting Indian water rights, and twenty transmission line projects using Indian tribal lands, was noncomprehensive.[3] It also was written nearly twelve years ago. Since that date, the number of projects and project applications has dramatically increased,[4] and the Indians and Interior have taken a more aggressive posture with respect to Indian land, water and fishing rights. See, *e.g.*, *Sierra Pacific Power Co. v. Federal Energy Regulatory Comm'n* (1982 9th Cir.) 681 F.2d 1134, 1136, cert. den. (1983) ___ U.S. ___, 51 U.S.L.W. 3756 (Pyramid Lake Paiute Tribe alleged that Sierra was operating without a license and that the project interfered with the tribe's fishing rights); *Swinomish Tribal Community v. Federal Energy Regulatory Comm'n* (1980 9th Cir.) 627 F.2d 499, 506 (Swinomish Tribal Community, Upper Skagit tribe and Sauk-Suiattle tribe alleged that City of Seattle's project 553 interfered with treaty fishing rights); *Southern California Edison Co., Project No. 344* (1983) 23 FERC ¶61,240 (Agua Caliente Band of Mission Indians contended relicensing of project would interfere with its groundwater rights); *Pacific Gas & Electric Co., Project 77* (1983) 23 FERC ¶63,050 (Covelo Indian Community contended that relicensing of project would interfere with its fishing rights); *Public Utility Dist. No. 1 of Ferry County, Washington, Project 4471* (1982) 20 FERC ¶61,256 (Confederated Tribes of Colville Reservation opposed preliminary permit arguing that an 1891 agreement gave the tribes exclusive rights to use all water power in the area); *Washington Water Power Co., Project 2545* (1981) 15 FERC ¶61,039 (Coeur d'Alene and Spokane Indian tribes contended that the company lacked title to Indian land occupied by its project); *Pacific Gas & Electric Co., Projects 233, 2735* (1981) 14 FERC ¶61,179 (Pitt River Indians of California intervened in relicensing proceeding claiming "Indian Title" to the project lands); see also *Public Service Co. of New Mexico, Docket EL 79-18* (1980) 10 FERC ¶61,273 (Interior on behalf of the Laguna Indian Pueblo and the Canocito Band of Navaho Indians requested that the Commission exercise jurisdiction over a proposed pumped storage project alleging that the project would affect the quantity and quality of their groundwater). Regardless of what impact the Ninth Circuit decision might have had in 1972, it is clear that it will have serious and widespread consequences today.[5]

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[2] Montana Power Co., Project 5; Northern States Power Co., Project 108; Escondido Mutual Water Co., Project 176; Moon Lake Electric Ass'n., Inc., Project 190; Portland General Electric Co., Project 2030; Arizona Power Authority, Project 2573; Southern California Edison Co., Project 120; Moon Lake Electric Ass'n, Inc., Project 1773.

The involvement of some of these projects with Indian Lands is a continuing source of controversy. See, *e.g.*, *Montana Power Co., Project 5* (1983) 24 FERC ¶61,088 (Indians filed competing application for a new license); *Montana Power Company, Project 5* (1983) 23 FERC ¶61,464 (Indians petitioned to increase annual charges during period of annual licenses); *Portland General Electric Co., Project 2030* (1982) 20 FERC ¶61,294 (Indians awarded increased annual charges); *Southern California Edison Co., Project 120* (1981) 14 FERC ¶61,022 (licensee relieved of obligation to relocate certain telephone and transmission lines upon payment of $185,000 to Indians); *Northern States Power Co., Project 108* (1980) 13 FERC ¶61,055 (Controversy with Indians over new license for the project).

[3] The letter omitted project 2042 which uses allotted lands within the Calispel Indian reservation (*See Public Utility Dist. No. 1 of Pend Oreilles County, Washington* (1952) 11 FPC 786); and project 2149 which uses Colville Indian reservation tribal lands (*See Public Utility Dist. No. 1 of Douglas County, Washington* (1962) 28 FPC 128.) There may have been additional omissions. The last Commission Annual Report which listed licensees who paid annual charges for the use of Indian lands was in 1955. Eighteen of the Projects listed in 1955 (see 35 FPC Ann. Rep. 230-237 (1955)) were not mentioned in the 1972 letter.

[4] See Herron, "The rush is on to find new gold in falling water," 13 Smithsonian 87 (December 1982) (pointing out 1800 applications for hydroelectric projects were filed in 1981 compared to 18 in 1978).

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[5] A review of reported Commission proceedings during just the last five years has disclosed over 40 additional projects or proposed projects that are alleged to affect specific Indian lands, water or fishing rights. See, *e.g.*, *Pacific Gas & Electric Co., Project 184* (1980) 13 FERC ¶62,269 (Pyramid Lake Paiute Tribe fishing and water rights); *City of Tacoma, Project 460* (1978) 3 FERC ¶61,033 (Skokomish Indian Tribe fishing and water rights); *Public Utility District No. 1 of Chelan County, Project 943* (1982) 21 FERC ¶61,264 (Yakima Indian Nation fishing rights); *Public Utility Dist. No. 1 of Okanogan County, Project 2062* (1983) 22 FERC ¶62,262 (Yakima Indian Nation fishing rights); *Public Utility Dist. No. 1 of Snohomish County, Project 2157* (1981) 17 FERC ¶61,056 (Tulalip Indian Tribe fishing rights); *Puget Sound Power & Light Co., Project 2494* (1978) 4 FERC ¶61,144 (Muckleshoot Indian Tribe fishing rights); *City of Seattle, Washington, Project 2795* (1979) 7 FERC ¶61,043 (Upper Skagit, Sauk-Suiattle and Swinomish Indian Tribes fishing rights); *City of Seattle, Washington, Project 2959* (1980) 13 FERC ¶61,010 (Tulalip Indian Tribe fishing rights); *Public Utility Dist. of Grays Harbor County, Project 3173* (1981) 15 FERC ¶62,074 (Quinault and Chehalis Indian Tribes fishing rights); *Cascade Waterpower Dev. Corp., Projects 3427, 3867, 4136* (1982) 18 FERC ¶61,247 (Confederated Tribes of Umatilla Indian reservation fishing rights); *Roza Irrigation Dist., Projects 3484, 3485, 3486, 3487, 3488, 4172* (1981) 17 FERC ¶61,082 (Yakima Indian Nation water and fishing rights); *Kittitas County Public Utility Dist. No. 1, Projects 3489, 4207* (1981) 15 FERC ¶62,342 (Yakima Indian Nation water and fishing rights); *Yakima-Tieton Irrigation Dist., Project 3701* (1981) 17 FERC ¶61,171 (Muckleshoot Tribes fishing rights); *Mitex, Inc., Projects 3725, 4528, 4903* (1982) 20 FERC ¶62,255 (Blackfeet Indian reservation lands); *Mitchell Energy Co., Inc., Project 3733* (1981) 15 FERC ¶62,058 (Tulalip, Puyallup, Muckleshoot, Susquamish & Yakima Indian Tribes fishing rights); *City of Tacoma, Project 4014* (1981) 17 FERC ¶61,172 (Tulalip Indian Tribe fishing rights); *Mason County Public Utility Dist. No. 3, Project 4089* (1981) 15 FERC ¶62,365 (Skokomish Indian Tribe fishing rights); *Georgia Pacific Corp., Project 4158* (1981) 15 FERC ¶62,317 (Lummi Indian Tribe fishing rights); *Mason County Public Utility Dist. No. 3, Project 4217* (1981) 15 FERC ¶62,416 (Skokomish Indian Tribe fishing rights); *Mason County Public Utility Dist. No. 3, Project 4258* (1981) 15 FERC ¶62,362 (Skokomish Indian Tribe fishing rights); *Georgia Pacific Corp., Project 4286* (1981) 16 FERC ¶62,242 (Upper Skagit and Sauk-Suiattle Indian Tribes, and Swinomish Tribal Community fishing rights); *Consolidated Hydroelectric Inc., Projects 4261, 5178* (1983) 22 FERC ¶61,122 (Hoopa Valley Tribe's water and fishing rights); *Glacier Energy Co., Project 4437* (1982) 21 FERC ¶61,209 (Upper Skagit and Sauk-Suiattle Indian Tribes fishing rights); *Roza Irrigation Dist., Project 4890* (1983) 24 FERC ¶62,192 (Yakima Indian Nation water rights); *Ernest H. Altice, Project 5371* (1983) 23 FERC ¶62,040 (Yakima Indian Nation water rights); *Lawrence J. McMurtrey, Project 6307* (1983) 23 FERC ¶61,246 (Upper Skagit Indian Tribe, Swinomish Tribal Community, and Sauk-Suiattle Indian Tribe fishing rights); *Lawrence J. McMurtrey, Project 6338* (1983) 24 FERC ¶61,074 (Upper Skagit Indian Tribe, Swinomish Tribal Community, and Sauk-Suiattle Indian Tribe treaty rights); *Town of Skykomish, Projects 6396, 6525* (1983) 23 FERC ¶62,039 (Tulalip Indian fishing rights); *Graves, Arkoosh and Arkoosh, Project 6707* (1983) 23 FERC ¶62,195 (Shoshone-Bannock Tribe fishing rights); *City of Yakima, Project 6857* (1983) 22 FERC ¶62,425 (Confederated Tribes & Band of Yakima Indian Nation fishing rights); *Capital Dev. Co., Project 6982* (1983) 23 FERC ¶62,267 (Upper Skagit Indian Tribe, Swinomish Tribal Community & Sauk-Suiattle Indian Tribe fishing rights).

The alleged impact of projects on Indian fishing rights has become so prevalent that since 1978 the Commission has inserted language in over 100 additional preliminary permits requiring consultation with any Indian tribes whose fishing rights may be affected. See *e.g.*, *Northern Wasco County People's Utility Dist., Project 7076* (1983) 24 FERC ¶62,138; *Chris Williams, Project 7111* (1983) 24 FERC ¶62,141; *Mason County Public Utility Dist., Project 7018* (1983) 23 FERC ¶62,240.

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Record

June 21, 1985

Senate Committee on Energy and Natural
Resources
Subcommittee on Water and Power
U.S. Senate
Washington, D.C. 20510

Dear Sir:

Unfortunately, when you scheduled your Hydro-electric Relicensing Hearings for Tuesday, June 11, this was in conflict with the National Legislative Conference of the National Council of Senior Citizens, which was held in Washington beginning Monday, June 10th through Thursday, June 12.

Neither the President of the National Council of Senior Citizens, Mr. Jacob Clayman, nor myself, the Executive Director could be free to testify before your Committee, although it is a subject which greatly concerns the older people of this country. However, as the relicensing of Hydro-electric Power plants was the subject of an NCSC study and review, I believe the Subcommittee will be interested in including this statement in the report of your Hearings.

In 1984, the General Board of the National Council of Senior Citizens, composed of nearly 100 members from all parts of the U.S., considered the Hydro-electric Relicensing question in respect to proposed legislation under clarification of the benefits.

The study committee and the Executive Committee recommended unanimously that the National Council of Senior Citizens protect consumers and seniors from expropriation of low-cost Hydro-electricity by government run municipal utilities. The Board was faced with insufficient data, until more information was gathered.

Subsequently, in March, 1985 the Committee was instructed to review the subject in greater depth, to prepare a written report of its findings and to submit a new recommendation for Board consideration if that were determined appropriate.

On March 15th, a copy of that report was mailed to each General Board member, together with an individual ballot as to whether he or she would endorse the unanimous vote of the Board Committee that NCSC support legislation such as proposed by Congressman Claude Pepper (H.R. 44) and Senator

First Vice President, Dr. Mary C. Mulvey, Providence, Rhode Island • **Second Vice President,** George J. Kourpias, Washington, D.C.
Third Vice President, Einar O. Mohn, Menlo Park, California • **Fourth Vice President,** Dorothy Walker, Detroit, Michigan
Secretary-Treasurer, J. Al. Rightley, Rochester, Michigan • **General Counsel,** Robert J. Mozer, New York

Alan Cranston (S.426) to protect the availability of low-cost Hydro-electric Power for seniors and the great majority of the nation's consumers of electric power.

I wish to report that the result of that ballot was 78 votes to endorse the unanimous vote of the Board Committee, 1 vote"No"and 1 Abstention.

The complete report of our Board is enclosed with this letter. After weighing the evidence, the overwhelming majority of the members of the Board who responded to the ballot (nearly 80% responded) feared the economic hardship and disruption associated with transferring ownership of these valuable assets, to the relatively small segment of consumers who happen to live in an area served by a state or municipally operated electric utility. Frankly, our Board members could not see why Congress could adopt a policy that could have the effect of making nine consumers worse off, perhaps for the sake of just one who would benefit.

Particularly, it was felt the elderly should not be forced to bear the burden of increased electric rates, no matter what the amount, in order to benefit a relatively small segment of privileged consumers whose only claim on the resource is that they happen to be served by state or municipal utilities.

Sincerely,

William R Hutton

William R. Hutton
Executive Director

WRH:sd

Enclosure

THE RELICENSING OF HYDRO ELECTRIC POWER PLANTS
AN NCSC STUDY AND REVIEW
OF THE IMPACT ON SENIORS

MARCH, 1985

In 1984 the General Board of the National Council of Senior Citizens considered the hydro-relicensing question in respect to proposed legislation to clarify the process.

The study committee and the executive committee recommended unanimously that the NCSC protect consumers and seniors from expropriation of low cost hydroelectricity by government run municipal utilities. The Board, faced with insufficient data, felt it could not approve the recommendation until more information was gathered.

Subsequently this study committee was instructed to review the subject in greater depth, to prepare a written report of its findings, and to submit a new recommendation for Board consideration if that were determined appropriate.

STATUS

In the current session of the Congress legislation again has been proposed to deal with hydro relicensing.

The Honorable Claude Pepper of Florida, a co-sponsor of H.R. 44, the Electric Consumer Protection Act, has released an analysis of the subject which is pertinent to this report.

PEPPER

Mr. Pepper says: "Recently I and other members of the Florida delegation "responded to an issue of basic fairness and equity for millions of consumers. At stake are billions of kilowatt-hours of low cost hydroelectricity. That inexpensive power could be taken away from the vast majority and made available to only a small segment of this country's consumers who by geographic happenstance are served by government-run State or municipal utilities.

SENIOR STAKE

Although Florida is not rich in hydroelectric power, this important consumer issue is arising with increasing frequency in the relicensing of existing projects throughout the country. And of course, it is of particular concern to me on behalf of the country's senior citizens, many of whom are living on fixed incomes. Congress must ensure that no Americans, and particularly the elderly, are forced to pay higher electric bills due to a preferential policy that would allow government-run utilities to take away this low cost energy from millions.

A little background will help to make clear the inequities inherent in such a preferential policy. Hydroelectric projects are licensed by the Federal Energy Regulatory Commission for periods of up to 50 years. When the initial license expires, the existing licensee must file an application with FERC for a new license if it wishes to continue to operate these valuable projects. At the time of relicensing, other applicants may file applications for the new license in competition with the existing licensee. If a competing application is judged on the merits by FERC to be best adapted to develop the resource, the competitor should and would receive the new license for the project.

BACKGROUND

But because of a lack of clarity in the Federal Water Power Act of 1920, now the Federal Power Act, and conflicting interpretations in recent years, the law is now unclear whether competing State and municipal utilities are to be given a preference against existing private licensees at the time of relicensing these projects. If State and municipal licensees have a preference, they will be able to take away hydroelectric projects from existing licensees and their customers simply by filing plans to develop the water resource that are only as good as the existing licensees, not better. Thus, by reason only of the government status of such potential competitors, the low cost hydroelectric power would be transferred from millions of consumers of existing licensees to the relatively small segment of consumers who happen to live in an area served by a State or municipally operated electric utility. This does not make sense.

If the existing licensee has had a successful 50-year track record of operating these projects in the public interest and FERC determines the licensee would continue to do so in the future, it should receive the new license. Why cause the economic hardship and disruption associated with transferring ownership of these valuable assets, when the public interest in utilizing the resource would not be served any better by the new owner?

The unfairness is readily apparent. Municipal competitors are currently trying to take away 11 hydroelectric projects from private utilities that have developed, operated, and maintained them for the benefit of their customers for 50 years or more. Over 8.5 million customers benefit from these 11 projects operated by the existing licensees. The competing municipal utilities have only 955,000 electric customers. This is a 9-to-1 ratio. Using 1983 prices and data, those 8.5 million customers realized, in that year alone, fuel cost savings based on equivalent fossil-fueled generation of approximately $308 million. And such equivalent fuel cost savings occur year after year. With approximately 177 investor-owned utility hydroprojects coming up for relicensing by December 31, 1993, and more after that, these same comparisons will be arising across the country.

MAJORITY LOSES

But why should Congress adopt a policy that could have the effect of making nine consumers worse off for the sake of just one who will benefit? Already customers of State and municipal utilities, which represent approximately 13 percent of the electric customers in the country have preferential access to 68.3 percent of the hydroelectric project capacity in the country. This is because Federal laws already gave them: First, a preference to obtain initial licenses to develop new hydroelectric sites, and second, a preference to purchase low cost power generated at federally owned and operated hydroelectric projects. Because the customers of private utilities, which represent 76.5 percent of the country's electric consumers, have none of these preferences, they have only 31.6 percent of the country's hydroelectric capacity. Given these facts, I do not believe it is good public policy for the small segment of electric consumers served by municipal utilities to receive through a relicensing preference even more of such inexpensive electricity simply because of the government ownership status of the electric utility which provides them service.

Hydroelectricity is a relatively inexpensive form of power because it has no associated fossil or nuclear fuel costs. Throughout most regions of the country it helps to hold down the cost of electricity for millions of consumers served by investor owned utilities having a generating mix that includes more expensive fossil or nuclear generation or both. If these utilities lose their hydroelectric projects their cost of electricity will increase. This would not be as troublesome if it resulted from fair competition for and better utilization of the resource. However, consumers, particularly, the elderly, should not be forced to bear the burden of increased electric rates, no matter what the amount, in order to benefit a relative small segment of preferred consumers whose only claim on the resource is that they happen to be served by State or municipal utilities. Those utilities for the most part already boast of electric rates well below typical rates for customers of neighboring investor-owned utilities. On this score, I direct my colleagues attention to a very constructive article by two MIT economics professors recently published in Public Utilities Fortnighly. The article concludes that a municipal relicensing preference would only promote economic inefficiency in the allocation of our hydroelectric resources. Joskow and Schmalensee, "Adversary Hydro Relicensing Applications: Using Economic Efficiency Criteria", Public Utilities Fortnighly, December 10, 1984.

I agree with the statement of the executive director of the American Association of Retired Persons in a letter to the President of the Edison Electric Institute endorsing H.R. 4402, Congressman Shelby's bill in the 98th Congress:

'The country's older Americans, most of whom live on limited incomes, can ill afford increases in electric rates and the cost of goods and services, particularly those resulting from laws and policies that do not reflect equity, fairness and the public interest.'

Congress should not enact yet another preference for a small class of consumers. Instead, Congress should promote fair competition for this valuable low cost form of electricity in order that it be spread equitably among as many consumers throughout the country as possible. H.R. 44, the Electric Consumers Protection Act, would do just that and, therefore has my full support."

QUESTIONS AND ANSWERS

Several questions have been raised concerning the hydro relicensing question.

This report will deal with the principal questions.

First, some basic facts:

1. When a utility burns fuel in a power plant the cost of that fuel is passed through to the customer. It is not marked-up as a profit item, just passed through.
2. When a company builds a hydro plant, that plant burns no fuel. Thus there are no fuel costs which consumers must pay.
3. When a hydro plant is substituted for a thermal plant all the avoided fuel cost benefits are passed through to the customers. That's a big saving for consumers.
4. Some municipal utilities serving a small fraction of electric consumers are trying to expropriate various private hydro electric plants located in different parts of the nation.

   At the present time the vast majority of consumers in the country benefit from these low cost plants.
5. The municipals already receive special allocations of power from projects built with federal taxpayer funds (Shasta Dam, TVA, Bonneville, Hoover, etc.). As a result, their rates are already far lower than those paid by the vast majority of consumers.
6. The Federal Power Act specifically confines any municipal-utility "preference" on relicensing so that it does not apply against the project's original licensee and its customers. That's what the Federal Power Commission (FPC) told Congress in 1968.

7. When the Federal Energy Regulatory Commission (the FPC's successor) announced in 1980 that it would give a preference to municipal systems in relicensing cases - it was wrong. As the California Public Utilities Commission put it, FERC's decision misread language that clearly applies preference "only against applicants other than the original licensee" and by so doing threatened to cause "retail customers of privately-owned electrical utilities to suffer a great and lasting injustice." (CPUC Brief to Supreme Court, April 1, 1983).
8. The Federal Energy Regulatory Commission recognized this error 1983 and reversed its position, thus protecting the interests of the majority of consumers as the Federal Power Act originally intended.

ASSERTION AND FACT

In defense of their attempt to grab low cost hydro power, supporters of the municipalities made some critical assumptions which deserve analysis.

1. Assertion: The nation's rivers and waterways belong to all of us. The private utilities are trying to profit from the nation's waterways.

   Fact: When an investor owned utility or any other entity develops a hydro facility that comes under the jurisdiction of the Federal Energy Regulatory Commission (FERC), no river is stolen. A FERC license gives the applying entity the right to develop the hydro resource. The intention of the Act was that private investment in the development of these rivers would permit widespread utilization of their benefits. Far from "stealing" any rivers, private projects make it possible for the majority of customers to utilize the power potential in those rivers. The water is unchanged, it returns, unharmed, to continue its journey downstream.

2. Assertion: Hydro licenses are exploited for private profit.

   Fact: The fuel cost saving made possible by use of hydro power (billions of dollars a year) yields no profit to the private utilities. It is passed directly through to utility customers.

3. Assertion: There is no yearly fee asked or paid, no rental charge.

   Fact: An annual fee is charged by the federal government, sufficient to cover the cost of administering the entire federal hydro licensing system. Investor owned utilities pay millions of dollars in annual license fees for hydro projects built without any government contribution whatever.

4. Assertion: Private utilities charge for hydroelectric electricity which costs essentially nothing to produce.

   Fact: There is no fuel charge associated with hydro power. The rate charged to customers for electric power includes no fuel charges for hydro.

   The cost to produce hydro electricity consists of: (1) the cost of raising the money to develop the actual project facilities (dams, conduits, generators, etc.) which is depreciated over time; and (2) the actual operating expenses of running the project (including taxes).

5. Assertion: H.R. 44, the Electric Consumers Protection Act, would relicense a project to its owner "forever".

Fact: H.R. 44 would remove the uncertainty now surrounding relicensing by making it clear that an existing licensee whose project and operations met the public interest goals of the Act should keep the project.

An owner would not keep its project under H.R. 44 if it did not satisfy the Act's requirements for sound development and broad distribution. It would also not keep the project if it refused reasonable new terms and conditions imposed by FERC. Each successive license is for a limited term (50 years or less) and at the end of each term FERC gets to reasses the licensee's performance and to impose new terms and conditions.

6. Assertion: The Federal Power Act, written in 1920, was intended to give municipal utilities a "preference" over a project's owner and its customers at relicensing time.

Fact: That statement short-change the language of the Act. It correctly quotes Section 7's language providing "preference" on relicensing only "in issuing licenses to new licensees..." but leaves out the rest of the section establishing that the "new licensees" against which a preference can be applied do not include the project's "original licensee". The actual text of Section 7 calls for a preference only:

> "in issuing licenses to new licensees under Section 15..." Federal Power Act Section 7 (a), 16 U.S.C. S800 (a).

In Section 15 the "original licensee" is carefully separated from the "new licensee" - latter being a stranger to the project. The full language of Section 7 makes it clear that the preference on relicensing applies only against applicants other than the original licensee...

7. Assertion: Hydro licenses are "lucrative".

Fact: Hydro licenses certainly have enormous fuel cost value - but that value goes to customers not to utilities.

8. Assertion: The injury to customers is greatly exaggerated.

Fact: The loss to customers from the 11 projects already under attack has been estimated at some $220 million a year. Full municipal hydro takeover could result in an annual increase of billions of dollars in the rate charged customers of privately owned utilities.

9. Assertion: H.R. 44 is the first step in what could be construed as an attack on the fundamental public policy of granting preference to public agencies in the use of water resources.

Fact: That is very misleading. Enactment of H.R. 44 would not in any way change or dilute the municipal preference provision of the Federal Power Act (FPA) in cases of initial permits or original licenses. Moreover, H.R. 44 does not touch in any way the marketing preference existing laws give to public agencies for federal power.

What H.R. 44 *does* provide is that any utility which has built and properly operated a hydroelectric project and which demonstrates it will continue to operate the project in the public interest will be able to relicense it. Thus its ratepayers, who have already paid the costs of building and maintaining the project, will be able to continue enjoying the benefits of the project's low cost power.

10. Assertion: H.R. 44 would result in a perpetual grant to private parties of the use of public water resources wherever IOU's have FERC-licensed hydroelectric projects.

Fact: That's wrong.The bill does not alter the federal government's existing authority under FPA to take over a project upon expiration of the project license. Moreover, the bill specifically provides for FERC's denying an IOU's application to relicense its project if FERC decides it would not satisfy Sec. 10(a) of the FPA.

11. Assertion: ....existing law has prompted competition in the relicensing of existing projects. As a result, competing applications have been submitted which propose additional power generation from existing projects, as well as improvements in environmental or recreational facilities. H.R. 44 would eliminate such competition.

Facts: H.R. 44 would not eliminate such competition. As noted above, H.R. 44 provides for FERC denial of an IOU's application to relicense its project if FERC determines it does not satisfy Sec. 10(1) of the FPA.

Sec. 10 (a) reads as follows:

> "(a) That the project adopted, including the maps, plans, and specifications, shall be such as in this judgment of the Commission will be best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce, for the improvement and utilization of water power development,and for other beneficial public uses, including recreational purposes; and if necessary in order to secure such a plan the Commission shall have authority to require the modification of any project and of the plans and specifications of the project works before approval."

If an IOU failed to satisfy the Sec. 10(a) "best adapted" test the new project license would go to a competitor that did meet that test.

RECOMMENDATION:

The Committee agrees with Congressman Pepper and recommends support of legislation like H.R. 44 to protect the availability of low cost hydro power for seniors and the great bulk of the nation's consumers.

Why, we must ask, should projects and their low cost electricity be taken away from some 80% of the nation's consumers and given to other smaller groups of consumers who happen to buy power from a municipal utility but never paid nickel one to build the projects?

Record

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June 25, 1985

Honorable Frank H. Murkowski, Chairman
Subcommittee on Water and Power
Committee on Energy and Natural Resources
212 Hart Senate Office Building
Washington, D.C. 20510

RE: S. 403, S. 426, S. 1219 and S. 1260
(Federal Power Act Relicensing Legislation)

Dear Senator Murkowski:

Enclosed for the Subcommittee's consideration in connection with the pending relicensing legislation and for inclusion in the written hearing record are the Clark-Cowlitz Joint Operating Agency's comments on S. 1260, which was introduced shortly before the hearings held by the Subcommittee on June 11.

Also enclosed are some questions and answers which attempt to address certain issues raised by Subcommittee members during the June 11 hearings.

Thank you for your consideration of CCJOA's views on this important subject.

Respectfully submitted,

Chris Williams

Christopher D. Williams

CDW:dp
encl.

cc: Members of the Subcommittee

CLARK-COWLITZ JOINT OPERATING AGENCY

COMMENTS ON

S. 1260

The Clark-Cowlitz Joint Operating Agency (CCJOA) has previously set forth in testimony filed with the Subcommittee on June 11 its views on the important issues and arguments with regard to relicensing legislation pending before the Subcommittee. We respectfully urge the Subcommittee's consideration of that testimony because it does set forth why (1) the municipal preference [1] and the municipality's last right to amend are not "unfair" and are necessary to ensure municipal competition for the license and in turn in the electricity marketplace and (2) why the current measure of compensation payable upon a license transfer upon relicensing, that is, net investment, is a fair and appropriate payment.

Here we will only comment on particular provisions of the S. 1260 which represents an initial effort to compromise the conflicting views of private and public power on these difficult issues.

First of all we are pleased to see that this bill (Sec. 2(c)(1)(A)) retains the municipal preference, which will be applied as a "tiebreaker" in the event that the plans of the competing municipal applicant for operation of the project are equally well adapted in the public interest.

We believe the preference is necessary in order to encourage municipal competition on relicensing. We also believe that a municipal competitor, which has no strategic advantages of its own, needs the last right to amend in order to give it a chance to overcome the inherent advantages of size and resources possessed by the investor-owned utilities. This point is more fully explored in our answer to Question 5 of our "Questions and Answers" which has been submitted to the Subcommittee along with these comments.

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[1] As used herein municipal preference means the preference for political subdivisions including public utility districts which is contained in section 7(a) of the Federal Power Act.

With regard to the second tier preference for the existing licensee in section 2(c)(1)(B), we think it would be preferable to utilize a rational method of sharing the output of the plant among the competitors rather than awarding the license on an "existing licensee takes all" or "new licensee takes all" approach. Payment for the shared output should be on an equal per unit cost basis. The competitors should be required to negotiate among themselves a suitable sharing arrangement which they would submit to FERC for approval. If in a reasonable period of time no agreement is reached by the two parties then FERC would be given authority to arrive at an allocation among the competitors on rational criteria.

One such criterion deserving special FERC consideration is which competitor can utilize the multi-purpose benefits of the water resource in the best interest of the region. For instance Merwin Dam is located in the middle of the Clark PUD and Cowlitz PUD service territory but all the power from Merwin is transmitted by PP&L away from the region to benefit PP&L customers located as far away as Wyoming or California. The FPA was intended to give the people of a river basin, like the people of Clark and Cowlitz Counties, a realistic opportunity at the time of relicensing to seek to exercise local influence over the use of a water resource, particularly where local uses of the water for purposes other than power production are important. While it is of course true that the use of a particular stream to develop power is generally of interstate character within the federal domain, it is also true that most of the possible uses of that same water resource — such as irrigation, flood control, consumptive use and recreation — involve local resource concerns and should be subject to local priorities. Surely the virtue of local control over water resources is as important today as it was when endorsed in the 1920 Act. It is quite possible that, over time, concerns for water supply or irrigation might approach the importance of power, thus increasing the significance of local control over water resources. Congress therefore should not enact changes to existing law which would substantially diminish the opportunity for meaningful local participation on relicensing.

We are concerned about the language in section 2(c)(2) providing: "The Commission shall not issue a new license unless it is satisfied that the applicant is able to carry out such plans." The current structure of the language of section 7(a) of the Federal Power Act makes a similar requirement inapplicable to license contests involving municipal applicants and we think that policy should be continued. To do otherwise would give FERC a mechanism to arbitrarily deny licenses to municipalities, especially where they might possess no previous hydropower operating experience.

It appears to us that in some measure at least the need for FERC consideration of the "public interest" standard set out in 2(c)(3)(A) is obviated by the payment requirement set out in section 2(d)(4).

Section 2(c)(3)(A) must be more finely drawn to eliminate FERC's opportunity to use it arbitrarily to find no tie and to deny issuing the new license to municipal competitors as it did in the Merwin case. To the extent that an additional amount above existing net investment is required to be paid to an existing licensee pursuant to section 2(d)(4), payment of that amount should eliminate to some extent the ability of the FERC to use the 2(c)(3)(A) criteria to find no tie and to deny the license to the competitor.

Our greatest problem with the concept of 2(c)(3)(A) is that we view relicensing as a poor mechanism to try to redistribute rate impacts among customers groups. This is more fully discussed at page 8 of CCJOA's testimony of June 11 submitted to the Subcommittee.

That same general observation applies to section 2(c)(4) which would require a successful competing applicant to pay, in addition to net investment and severance damages payable under the existing law, "50 per centum of the additional cost to the existing licensee of providing the equivalent amount of the least-cost alternative electric energy to its customers for the term of the new license . . . ."

Another fundamental problem is that this provision assumes that the existing licensee and its customers are entitled to some benefits beyond the expiration of the license period. (This issue is addressed in more detail at pages 6-8 of CCJOA's testimony of June 11.) Why are the existing licensees ratepayers any more deserving of rate relief that the competitor's customers which have never had the benefits of the license to use the public resource? We assume the provision has been drafted in the interests of protecting existing ratepayers, but it is not clear why they should be favored.

The measure of compensation could give those customers benefits far beyond any notion of equity. Furthermore, as a practical matter, the amount is probably impossible to calculate. Prudent utility forecasting does not embrace rate and load forecasts beyond a 10-year period. One only has to look to the experience of the PNW over the last 10 years to appreciate this fact. Projections would be further complicated by regional (or particular utility) power surpluses, utility mergers, or new technology.

A calculation seeking to determine a utility's alternative power costs, or avoided costs for each year for a future term of 30 years, would amount to pure speculation. Assuming such numbers could be determined, would they be present-valued and paid out in a lump sum presently as it appears from the language of the subsection providing for payment "before taking possession of" the project? What if the projections were wrong? How would corrections be made? The standard is without reference to the operating cost of the newly licensed hydro resource itself and the assumptions required to make the calculations are shifting and subject to manipulation. We have explored avenues of compensation other than net investment, but have found no other generic formula which will be suitable in all circumstances.

If political realities require that some measure above net investment must be paid, and we hope that will not be the case, a provision like that found in section 3 of the

Matsui bill (H.R. 1815) would be preferable to 2(c)(4). Section 3 of H.R. 1815 provides for a payment in the form of energy output from the project for a period of time to mitigate any rate impacts there might be. This approach has the advantage of measuring compensation in terms of the output of the hydroplant itself — the operating costs of which can be fairly easily determined. Those costs will of course include net investment and any additional costs associated with project improvements or mitigation resulting from the relicensing process.

Finally, but very importantly, we support wholeheartedly section 2(e) which would preserve CCJOA's right to complete its competition for the Merwin license under the provisions of existing law. CCJOA has spent public monies and nine years in competition for Merwin, all in reliance on its responsibility to pay PP&L its "net investment" in the project, not more. It would be unfair now to change the rules which encouraged CCJOA's decision to compete. We applaud the bill for recognizing that equity. We would only urge that the language of the bill itself or the report language be modified to make absolutely clear that CCJOA's application for Merwin is intended to be protected by the provision. This is so because there could be some confusion as to whether the Merwin case is "pending before the Commission" on the date of enactment — since the case has been decided by FERC and is now "pending" in the courts. It also appears that if the word preceding the second condition were changed from "and" to "or", the Merwin case would be clearly included within the protection of that condition and free from any future challenge. Alternatively we urge the adoption of the language of the savings clause in the Matsui bill, H.R. 1815.

Finally, CCJOA wishes to make clear that it does appreciate Senator Evans' sincere efforts to fashion an acceptable bill — particularly the bill's preservation of the municipal preference and the savings provision for previously filed cases — and CCJOA looks forward to a continuing constructive discussion of the issues.

QUESTIONS AND ANSWERS

1. Is public power stronger today then it was in 1920?

In 1920, as compared with today, there was not much of a public power presence in terms of the number of systems and people served, although the principles underlying public power were widely accepted. The provisions of the Federal Power Act were in fact drafted to encourage the development by and licensing of hydroelectric sites to municipalities. This was done not only by providing a preference to municipalities[1] for preliminary permits, initial licenses and new licenses but also by providing for limited license terms and for non-burdensome terms of transfer of a license to a municipality.

But just because there are more public systems now than in 1920 does not mean that the marketplace and all consumers do not still need the benefit of the relicensing preference. Although publicly-owned systems within APPA now number 1750, they serve less than 15% of the population. On the other hand, the number of investor-owned utilities has decreased from about 4,000 in 1920 to only 210 today, yet they hold the lion's share of the market. This ever increasing concentration of the electric consumer market in fewer and fewer hands is a manifestation of a concerted effort by the private utilities to thwart competition — a concerted effort that includes, for example, limiting public utilities' access to power generation, transmission, and pooling arrangements. Public systems need the "equalizer" that is represented by the preference to abate this monopolistic trend. To take away the municipal preference can only weaken public power at a time when it should be strengthened in order to at least maintain its relative share of the market.

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[1] The "municipal preference" set forth in section 7(a) of the Federal Power Act applies to states and their political subdivisions, including public utility districts.

2. **Would CCJOA initiate legislation advocating a municipal preference, if it is determined in the Merwin case that there is no preference?**

We strongly believe that existing law provides a municipal preference. It was based on that belief that we pursued the Merwin license. It would be most unfortunate, and we think extremely unlikely, for the court to rule there is no relicensing preference. But if the court did so rule, we think that as a practical matter enacting new legislation in the face of such a ruling would be so problematic as to make any new initiative on our part unlikely. Indeed, that is a compelling reason why Congress should await the Merwin decision rather than hastily enacting legislation.

We recognize of course that, notwithstanding the prudence of awaiting a judicial ruling, others have initiated relicensing legislation. With the obvious caveat that we do not favor any legislation at this time, among the presently proposed bills before the Subcommittee we favor, S. 1219 and S. 1260 over S. 403 and S. 426. Although S. 1219 eliminates the municipality's last right to amend, which we view as very important to our opportunity to compete, it does contain a tie-breaking municipal preference. This is in contrast to the existing licensee preference contained in the Wallop bill, S. 426, and the Johnston bill, S. 403. In addition S. 1219 provides for a transfer price preferable to that set forth in the Wallop bill. (More detailed comments on the later-introduced S. 1260 are being separately provided to the Subcommittee.)

3. **What is the competitive relicensing standard which should govern competition between two public entities or two private entities? What should be done in the event of a "tie"?**

The Power Act makes no provision for preference between applicants of equal status nor does it provide such applicants any final right to amend. Under those provisions a "tie" is unlikely. Nevertheless if such a tie should occur it makes sense in our view to utilize a rational method of sharing the output of the plant among the competitors. Payment for the output should be on an equal per unit cost basis. The competitors should be required to negotiate among themselves a suitable sharing arrangement which they would submit to FERC for approval. If in a reasonable period of time no agreement is reached by the two parties then FERC would be given authority to arrive at an allocation among the competitors on rational criteria.

One such criterion deserving special FERC consideration is which competitor can utilize the multi-purpose benefits of the water resource in the best interest of the region. For instance, Merwin Dam is located in the middle of the Clark PUD and Cowlitz PUD service territories but all the power from Merwin is transmitted by PP&L away from the region to benefit PP&L customers located as far away as Wyoming and California. The FPA was intended to give the people of a river basin, like the people of Clark and Cowlitz Counties, a realistic opportunity at the time of relicensing to seek to exercise local influence over the use of a water resource, particularly where local uses of the water for purposes other than power production are important. While it is of course true that the use of a particular stream to develop power is generally of interstate character within the federal domain, it is also true that most of the possible uses of that same water resource — such as irrigation, flood control, consumptive use and recreation — involve local resource concerns and should be subject to local priorities. Surely the virtue of local control over a water resource is as important today as it was when endorsed in the 1920 Act. It is quite possible that, over time, concerns for water supply or irrigation might approach the importance of power, thus increasing the significance of local control over water resources. Congress therefore should not enact changes to existing law which would substantially diminish the opportunity for meaningful local participation on relicensing.

4. Are publicly held licenses subject to recapture by the federal government? Are they subject to relicensing? If a project currently licensed to a municipality is issued to a new licensee on relicensing what is the measure of compensation to be paid to the predecessor public licensee?

The 1953 amendments to the Federal Power Act provide that publicly-held licenses can not be recaptured by the federal government. They can, however, be condemned by the federal government for emergency reasons.

As far as we know there has been no case deciding the question of whether publicly-held licenses, although protected from federal recapture, can be relicensed to another entity upon license termination. Nor have there been any cases on the related question of what the transfer price in such an instance would be. While there may be legal arguments which can be made as to the payment of a value other than net investment in such a case, it seems to us that net investment should be the applicable transfer price.

5. Aren't the municipal preference and a municipality's last right to amend contradictory to the concept of "competition"? If a municipality is once licensed doesn't their preference and their last right to amend assure them of a perpetual license?

CCJOA believes that it simply ignores reality to think that the way to insure "fair" competition on relicensing is to eliminate the municipality's relicensing preference and last right to amend. The public systems need the preference to compete — otherwise the deck is stacked against them.

Generally IOUs have large integrated base load and peaking systems, huge service territories and concomitantly huge assets. On the other hand, municipal systems are generally relatively small, serving limited geographic areas, and having limited operating assets. To illustrate the comparison in Merwin, PP&L covers parts of six states and has assets of more than $5 billion; CCJOA covers two counties and has combined assets of less than 5% of PP&Ls.

The smaller municipal systems suffer from economy-of-scale disadvantages, are often wholly dependent upon investor-owned utilities for the power they resell to municipal residents, and are often excluded by those same IOUs from joint generation and transmission projects and from power pooling arrangements.

In addition to these inherent advantages of size, system and financial resources, an existing private utility licensee may claim its incumbency as an advantage over potential competitors for the license. In Merwin PP&L carried that type of argument to the extreme. As licensee of two hydro projects upstream from Merwin, PP&L claimed that it alone could coordinate Lewis River operations for hydraulic and electric purposes because, if Merwin were licensed to CCOJA, PP&L would simply refuse to coordinate its upper project operations with Merwin.

These sorts of arguments (amounting to little more than "bigger is better") if sustained can only mean that the big get bigger and the small stay small, get squeezed out of business, or never get into business in the first place. Elimination of the preference and last right to amend will mean a lost opportunity for many small municipal systems, existing and yet unformed, to obtain a source of generation.

The IOUs lamely contend that such competition may not be good because municipalities, which must pay only net investment for the project, will overbid. But it is the future use of the hydro resource which holds value to the private utility and which provides the incentive to compete, not what may or may not have been invested by the private utility in the past. The undepreciated capital investment and any additional cost for improvements which must be recovered in the future from ratepayers will be the same for either competitor. In truth municipalities are less likely than IOUs to overbid. Municipalities' bids must stand ratepayer scrutiny in an open forum, and municipalities have less to fear from "yardstick" competition and comparisons than IOUs do. In short, private utilities have far greater financial resources and incentives to invest in a relicensing contest than do municipalities.

The municipal preference gives small existing or emerging public systems the opportunity to compete against these greater resources of the investor owned systems. Together with the last right to amend (which allows a municipal system to match, if it can, the plans of the larger competitor), the preference "unstacks" the deck.

Without the preference and last right to amend, most public systems, and certainly the CCJOA, could not compete. Their ratepayer-voters would simply not allow the utilitization of public funds in a relicensing contest without a realistic possibility of winning the new license in a competition with a much larger system. This does not mean that the municipal competitor will automatically win every time. For instance, it may be that the private utility proposes or the Commission requires a massive and expensive generation uprating of the existing project which a small municipality's ratepayer-voters may not be able or willing to take on.

The point of the preference therefore is to allow small entities the opportunity to compete — much like the small business preference. That opportunity should not lightly be discarded because all consumers, those of private and public systems alike, will benefit from competition and, conversely, will suffer from the loss of it.

To date none of the proposed legislation offers any effective substitute to the preference mechanism for assuring competition. If competition is a desired goal, and it surely is, it seems imprudent to discard a mechanism that experience has shown to work in favor of one that may not.

NATIONAL
FARMERS
UNION

June 25, 1985

The Honorable Frank Murkowski
Chairman
Senate Subcommittee on Water and Power
709 Hart Senate Office Building
Washington, D.C. 20510

Dear Senator Murkowski:

I am writing on behalf of the National Farmers Union, a membership organization of approximately 300,000 independent, family farm producers. The National Farmers Union is concerned about hydroelectric relicensing legislation pending before your Subcommittee and I am submitting this letter for inclusion in the hearing record of June 11.

In 1985, delegates to the 83rd Annual Convention of the NFU adopted a policy statement which urged Congress to reject any effort to eliminate the preference principle in the relicensing of hydroelectric projects. In the last year the investor-owned utilities have redoubled their efforts to eliminate competition in the relicensing process and to lock up their control of currently licensed projects in perpetuity. As our policy states, NFU firmly believes that the nation's waters belong to the people. The federal government, as trustee of these resources, has an obligation to ensure that they are developed and used in a manner which promotes the public interest. NFU believes the public interest can be most effectively served by a relicensing process which promotes vigorous competition. The Wallop Bill, S. 426, would end competition through a relicensing process that virtually guarantees renewal for current licenseholders.

Consumers of all utilities, whether public or private, would gain from a competitive process which maximized hydro project benefits, including power generation, recreation benefits and environmental enhancements. For example, the General Accounting Office found that in five of nine competitive licensing cases they examined, the licensee submitted an amendment to upgrade the project after a competitive application was filed. Under the Wallop bill, with the pressures of competition removed, such benefits would generally not be achieved. Clearly, the public interest is not served by such a closed process. Analysis has shown that consumers of private utilities would suffer rate increases of at most a penny a day in the event of a license transfer. This small loss is more than recouped through the "yardstick competition" with publicly owned utilities which helps restrain rates for all consumers.

600 Maryland Avenue, S.W. • Suite 202 • Washington, D.C. 20024 • Phone (202) 554-1600

If the Subcommittee feels that it is necessary to make changes in current law -- which we question -- I would appreciate your doing whatever you can to ensure that publicly owned utilities retain the preference which is a necessary incentive to their being able to compete against larger investor-owned systems. Small public systems are simply unlikely to invest the millions of dollars such a license competition requires without such a tie-breaker. The preference is essential to effective competition within the electric utility industry and is an invaluable protection for the consumer against the unbridled power of monopoly utilities.

For your information, I have attached a copy of the National Farmers Union policy statement on public preference.

Sincerely,

Robert J Mullins

Robert J. Mullins
Director of Legislative Services

Enclsoure
RJM/en

3. Hydroelectric Sites and Federal Power Marketing

We urge continuing development of hydroelectric power sites, where they are cost-effective and ecologically compatible, in order to assure that a continuous supply of low-cost electricity will be available at all times.

We advocate fair and equitable principles in federal hydropower marketing policies, including continuation of preference for municipal and rural electric cooperatives and the sale of federal power at cost-based rates.

We endorse the basic concepts and premises that are embodied by the 1944 Flood Control Act.

4. Preference Principle

The nation's rivers and streams belong to the people. The federal government, as trustee of these resources, has an obligation to insure that they are developed and used in a manner which promotes the public interest. In order to carry out this obligation, the Congress on more than thirty occasions has enacted legislation providing that preference in marketing federally produced power shall be given to local public agencies and rural electric cooperatives. Preference in availability of federal power has been of inestimable benefit in providing a source of low-cost power to electrify America's farms.

In 1920, the Congress also granted a preference to municipalities and other public agencies in obtaining licenses to develop public water resources, and in relicensing such projects when the original licenses expired.

Today, the private power companies are challenging, through administrative action, preference in marketing federal power, and they have instigated the introduction in Congress of legislation which would eliminate preference in relicensing of hydroelectric power projects.

The National Farmers Union urges Congress and the Administration to reject any effort to weaken or eliminate the preference principles in the marketing of federal power and in the licensing or relicensing of non-federal hydroelectric power projects. These preference principles are interrelated. Elimination of the public preference in relicensing would invite further attacks on the principle of preference in the marketing of federally produced hydroelectric power.

The National Farmers Union also urges Congress to amend the Federal Power Act to provide a preference to rural electric cooperatives in the licensing and relicensing of water power projects. Rural electric cooperatives were not in existence when this Act was adopted in 1920, and it is an accident of history that cooperatives were not accorded preference in licensing and relicensing of water power projects, such as they were given subsequently in the marketing of federal power.

5. Nuclear Energy

When nuclear wastes can be stored without being harmful to humanity and the environment, nuclear power should be given the same priority in resolving our energy shortage as hydroelectric, coal, solar, wind, methane, gasohol, alcohol, and geothermal.

We urge acceleration of development of fusion energy technology, which is relatively free of polluting effects.

Affected agricultural areas, including surrounding water aquifers, should be exempt from consideration for nuclear repository sites.

F. Alternate Energy Sources

1. Development

Programs for the development of solar, geothermal, wind, hydrogen, methane, gasohol, alcohol, and other non-polluting renewable energy sources should be conducted, with special emphasis on solar energy and gasohol research directed toward developing self-sufficient units suitable for farm, home, small industry, and business use.

We strongly urge that the farm cooperative system pursue development and marketing of gasohol and alcohol through its network of local and regional cooperatives to enable producers to retain some control over their commodities.

2. Alcohol

Rapid development of alcohol fuels and other fuels from renewable sources, together with the development of synthetic fuels, will help achieve a larger degree of energy self-sufficiency.

We are, therefore, appalled by the actions of the Administration in reducing the federal investment in alcohol fuels production and abandoning the federal role in synfuels research and development. Abdicating federal responsibility for promoting these alternate fuel sources leaves the field to the forces which dominate the petroleum industry.

Nebraska Public Power District

GENERAL OFFICE
P O BOX 499, COLUMBUS, NEBRASKA 68601-0499
TELEPHONE (402) 564-8561

June 25, 1985

The Honorable Frank Murkowski
Subcommittee on Water and Power
Room 212, Hart Senate Office Building
2nd and C Streets, N.E.
Washington, DC 20510

Dear Chairman Murkowski:

The Nebraska Public Power District owns and operates a hydroelectric project on the Nebraska portion of the Platte River. The project was licensed almost 50 years ago by the then Federal Power Commission under authority of the Federal Power Act. Since the original license expires soon, we have filed an application at the Federal Energy Regulatory Commission for a new license and will be involved in proceedings concerning that application in the near future. One element of this relicensing process which may be unclear concerns coordination with environmental laws, in particular, the Endangered Species Act.

For some time now the FERC has exercised jurisdiction over hydroelectric projects on navigable waters. The Commission's charge has been to regulate in the public interest and has necessitated a delicate balancing of many (often competing) interests based upon a carefully developed factual record. It is this routine use of a carefully developed factual record which adds measurably to the credibility of the licensing process. And, it is this very credibility which may be eroded if opinions of the Fish and Wildlife Service are permitted to be used in FERC licensing proceedings without also being subject to the same procedural protections, such as cross-examination, as any other matter entered in evidence in such proceedings.

For example, the Fish and Wildlife Service may determine through an administrative rulemaking process that one or more areas inhabited or used by an endangered species are critical habitats. While the rulemaking process generally provides a good deal of information, it does not provide the full range of procedural due process protections routinely followed in FERC licensing proceedings. We understand the desirability of rulemaking procedures in many situations because they are adequate for a particular purpose when compared to the more time-consuming and costly adjudicatory procedures. By the same token, however, it would be highly improper and unfair if the usual adjudicatory procedures at FERC would be set aside if Fish and Wildlife were to seek to enforce its views in a hydroelectric project relicensing proceeding. In brief, the FERC adjudicatory procedures must, in the interest of fairness, apply with equal force to Fish and

Honorable Frank Murkowski
Page #2
June 25, 1985

Wildlife determinations as to any other matters asserted in relicensing proceedings. Thus, for example, Fish and Wildlife's biological opinions should be subject to introduction and cross-examination in the FERC proceeding.

Our understanding is that the state of the law today would likely result in this outcome. Nonetheless, in light of the substantial interests at stake, we believe that Congress should resolve the matter firmly and clearly in any amendments to the Federal Power Act. It always seems to be that technical legal issues such as this often cause major problems if left unresolved. We hope you will take the opportunity of amending the Federal Power Act to assure that this does not become the case here.

Thank you and please include this letter in your Committee's record of hearings on the Federal Power Act.

Very truly yours,

NEBRASKA PUBLIC POWER DISTRICT

CR Jones

Cecil R. Jones
Assistant General Manager

CRJ/bms

cc: All Members of Subcommittee
on Water and Power
The Honorable J. James Exon
The Honorable Edward Zorinsky

May 30, 1985

Hon. Frank Murkowski, Chairman
Members of Senate Committee on Energy and Natural Resources
Subcommittee on Water and Power

Gentlemen:

The Exchange Club of Santa Cruz, California, strongly urges your support of S 426, a bill that would clarify the preference clause of the Federal Power Act and eliminate municipal utility claims to a "preference" in the relicensing of hydroelectric power projects, while establishing just compensation in the event of takeover.

Municipal preference at relicensing time would result in the diversion of low-cost power from millions of customers of regulated utilities to the benefit of a privileged few customers of municipal utilities who for the most part already have access to cheap federally subsidized power.

Confusion in interpretation of the Federal Power Act has led to conflicting decisions about application of preference on the part of the Federal Energy Regulatory Commission. The legislation now before your committee will resolve the question and benefit millions of consumers throughout the nation.

We respectfully ask that our position be put into the record of your proceedings.

Jack A. Rossiter

Jack A. Rossiter, President
for the Exchange Club of Santa Cruz

Electric Consumers Protection Act of 1985
H.R. 44, S. 426

Statement for the Record by

The National Council of Senior Citizens
925 15th Street, N.W.
Washington, D.C. 20005

July 25, 1985

The General Board of the National Council of Senior Citizens, representing over 4.5 million older Americans across the nation, recently voted 78 to 1 to support the Electric Consumers Protection Act of 1985 (H.R. 44 and S. 426). The NCSC Board believes this vital relicensing legislation is necessary to protect the availability of low-cost hydropower for seniors and the great majority of the country's consumers of electric power.

As a result of conflicting interpretations of the 65-year-old Federal Power Act, investor-owned hydroelectric power facilities could soon be denied relicensing and state and municipal utilities granted preference when the license expires. Yet, the present owners of these low-cost energy facilities would not lose their licenses to competing applications demonstrating plans for better management or more efficient operation. Instead, investor-owned companies--who put up the financial resources to build utilities, whose customers have paid for the operation and maintenance of these projects, and who have operated for up to 50 years in accordance with regulatory standards to protect the public interest--would be denied relicensing simply because they are not government-owned.

Such preference-based takeovers represent bad public policy that would unjustly penalize existing license holders and drive up prices for millions of American consumers.

The Electric Consumers Protection Act would remove the uncertainty currently associated with relicensing. Enactment of H.R. 44 would in no way alter or dilute the municipal preference provision of the Federal Power Act in cases of initial permits or original licenses, nor would it affect the marketing preference existing laws give to public agencies for federal power. H.R. 44 would simply provide that any utility which has built and properly operated a hydroelectric project and which demonstrates that it will continue to operate the project in the public interest will be able to relicense it. In this way, the utility's consumers who have already paid the cost of building and sustaining the project will be able to continue to reap the benefits of the project's fuel-free, low-cost electricity.

The National Council of Senior Citizens calls on the Congress to ensure that no Americans, particularly elderly living on reduced incomes in retirement, are forced to pay higher electric bills due to a preferential policy that would allow government-run utilities to expropriate low-cost energy from privately-owned companies. We urge you to act swiftly toward passage of the Electric Consumers Protection Act of 1985.

1985 JUN 21 PM 5: 11

Mid-West Electric Consumers Association, Inc.

EVERGREEN EXECUTIVE BUILDING
27972 MEADOW DRIVE, SUITE 300
P.O. BOX 910
EVERGREEN, COLORADO 80439
(303) 674-6675

LOW COST POWER FOR EVERYONE

June 18, 1985

Honorable Frank H. Murkowski
Chairman
Water and Power Subcommittee
Senate Energy Committee
Senate Office Building
Washington, D.C. 20510

Dear Chairman Murkowski:

On behalf of the Mid-West Electric Consumers Association, I would like to express our strongest opposition to S.426 and other bills pending before your subcommittee which would amend the hydroelectric relicensing provisions now contained in the Federal Power Act.

Mid-West is a non-profit membership corporation headquartered in Evergreen, Colorado. It is composed of over 300 rural electric cooperative and publicly owned electric systems located throughout nine of the Missouri Basin states: Colorado, Wyoming, Montana, North Dakota, South Dakota, Nebraska, Kansas, Iowa and Minnesota. These systems serve over 3,000,000 consumers. Mid-West member systems directly or indirectly purchase power generated at Corps and Bureau projects and marketed by the Western Area Power Administration.

S.426 would destroy a long-standing public policy of not allowing private interests to occupy the nation's waters in perpetuity. When Congress passed the Federal Power Act in 1920 it made certain that private use of the nation's waters for building hydroelectric projects to make a profit would be restricted to a term of 50 years, after which the federal government could recapture the project, it could be licensed to a public body on a preferential basis, or relicensed to the original private developer. This statutory scheme insured that monopolization of water resources would not occur, heeding the warning given by President Theodore Roosevelt in 1908:

> We are now at the beginning of great development of water power. Its use through electrical transmission is entering more and more largely into every element of the daily life of the people. Already the evils of monopoly are becoming manifest; already the experience of the past shows the necessity of caution in making unrestricted grants of this power.

Water resources should be in the control of the nation's citizens who own them. Federal recapture and preference in relicensing to local municipalities and other public bodies on a preferential basis provides the competitive balance needed to avoid monopoly of hydroelectric resources. S.426 suggests a change in the existing law which is alien to this country's fundamental commitment against private monopolization of public resources. Mid-West knows of no acts of Congress which have placed water resources in the hands of private interests in perpetuity.

Allowing perpetual relicensing would remove the competitive opportunity for applicants to compete for an existing project based on its best adapted and most comprehensive use, including power production, domestic use, or irrigation. Present law insures that competitors can propose changes in existing hydroelectric facilities to maximize their usefulness. S. 426 would eliminate that opportunity for the future use of water by removing the possibility of competition for changing projects built fifty years ago.

Private companies receiving licenses whose terms are expiring did so with the full knowledge that they would make a profit from the projects, and if not relicensed to them, would be paid for their net investment plus any severance damages. S. 426 represents a Hydro Power - Grab that is not only bad policy, but at odds with the facts. Of 130 licenses which have expired, only 11 are being contested. There is no evidence to suggest private entities will lose all their licenses. Factors such as location, geographically and electrically, the condition of a project, and the overall question of whether a better use could be made of a project by a new licensee, will necessarily limit the number of utilities, public or private, competing for projects at the end of a license term. Preference on relicensing is but one of the protections built into the Act to insure that the opportunity for competition and as a protection that the citizens of the nation have the ability to utilize their water resources. It should also be stressed that preference on relicensing does not automatically grant a new license to a municipality or a public body: it only applies in tie-breaking situations when the Federal Energy Regulatory Commission examines competing applications, thus upholding the policy of competition to insure that the best adapted proposal for the use of water prevails.

Preference on relicensing is but one of many laws passed by Congress to insure the survival of a competitive, pluralistic electric industry. Others include the Public Utility Holding Company Act, antitrust provisions of the Atomic Energy Act, and the antitrust laws. S. 426 and similar bills would upset the delicate competitive balance which, in total, benefits all consumers through the lowest possible rates and best possible service. The electric industry is unique - a capital intensive industry with utilities, large and small, engaged in ongoing competition. S. 426 would erode an important part of the ultimate consumer's protection against monopoly.

If any legislation is to be enacted, Mid-West supports mandatory recapture of private projects by the federal government. In our region there is a federal power program based on hydroelectric development administered by the Western Area Power Administration, under which cooperative, public and private utilities plan together through federal transmission and hydrogeneration. Such region wide planning benefits consumers in price, reliability, and service. Additions to the hydropower base of the federal program would help in assuring future federal power supply. In addition, mandatory federal recapture of private projects would bring federal power generation and planning to those areas of the country- the Northeast - Midwest - where the benefits of a federal program are not now available to consumers.

Attached to this letter is a resolution supporting mandatory federal recapture passed by the Mid-West Board of Directors.

I would like to request that this letter be made a part of the record for the hearing held on June 5, 1985.

Sincerely,

Fred G. Simonton
Executive Director

FGS/sp
Encl.

FEDERAL RECAPTURE OF HYDROELECTRIC PROJECTS

WHEREAS, private entities may obtain licenses under the Federal Power Act to develop hydroelectric projects with licenses having a term of up to 50 years, and receive profits from the sale of power from such projects, and

WHEREAS, preference in the sale of power to rural electric cooperatives and municipally-owned electric utilities from federal hydroelectric projects insures that citizens receive the benefits of water owned by them, and that competition is maintained in the electric utility industry, and

WHEREAS, upon expiration of a license held by a private entity, the Act provides that municipalities or states have a preference to obtain a new license, or that the federal government may recapture and operate the project, and

WHEREAS, Congress is considering proposals to destroy preference on relicensing by granting private entities the right to hold their license in perpetuity, and

WHEREAS, the federal government has not exercised its right under the Act to take over a project upon license expiration, and

WHEREAS, in areas with existing federal power marketing agencies additional hydroelectric power would help meet the needs of preference customers, and

WHEREAS, federal takeover of projects upon license expiration would bring the benefits of a federal power program to those areas of the nation without federal hydroelectric development,

NOW THEREFORE, BE IT RESOLVED: That the Mid-West Electric Consumers Association, the National Rural Electric Cooperative Association, and the American Public Power Association should urge the Congress of the United States to amend the Federal Power Act in a manner making it mandatory that the federal government take over all hydroelectric projects under license to private entities upon expiration of the license, and that power from such projects be sold to rural electric cooperatives, municipal electric systems and other publicly owned electric systems under the preference clause.

Resolution adopted unanimously by the Mid-West Electric Consumers Association Board of Directors March 18, 1985.

June 5, 1985

To: Hon. Frank Murkowski, Chairman
Members of Senate Committee on Energy and Natural Resources
Sub committee on Water and Power

The Serales Valley Community Services Council of Trona, California, asks that you support S 426, a bill that responds to an issue of fairness and equity for millions of our nation's consumers. At stake are billions of kilowatthours of low-cost hydroelectricity. This inexpensive, renewable power could be taken away from the vast majority of electric consumers and made available to only a small segment of the population who are served by municipally owned utilities.

A lack of clarityin the Federal Power Act, combined with conflicting interpretations by the Federal Energy Regulatory Commission, has led to an ongoing and costly debate as to the application of "preference" at the time of relicensing of hydroelectric facilities. Existing licensees that had operated these facilities in the public interest, whose customers had paid for their way, lose their plants and their customers would face increased electric rates.

S 426 willclarify the Federal Power Act, and ensure that preference will not apply at the time of relicensing hydroelectric facilities. The bill will establish just compensation in the event that a project should be lost.

The legislation will assure the benefits of hydroelectric power for the greatest number of people. In the opinion of Searles Valley Community Services Council that is correct public policy.

Please enter our comments into the record.

Sincerely,

Jerry Williams, President
Searles Valley Community Services Council

THE CITY OF **Dos Palos**

CITY HALL - 1546 GOLDEN GATE AVENUE
DOS PALOS, CALIFORNIA 93620
PHONE (209) 392-2174

June 3, 1985

Honorable Frank H. Murkowski, Chairman
Water and Power Subcommittee
Senate Committee on Energy and Natural Resources
United States Senate
Washington, DC 20510

Dear Senator Murkowski:

On June 11, 1985, your committee will consider S426, a bill that would clarify the preference clause of the Federal Power Act and eliminate utility claims to a "preference" in the relicensing of hydroelectric power projects, while establishing just compensation in the event of a takeover.

The City of Dos Palos has gone on record of supporting these kind of changes to the Federal Power Act.

As a co-sponsor of S426 you have already done a great deal to support such vital legislation. We urge you to lobby your collegues in the Senate to unanimously support this bill when it comes before your committee.

Please make this letter a part of the record.

Thank you for your support.

Sincerely,

MARK BAUTISTA
City Manager

City of Los Banos

June 4, 1985

Honorable Frank H. Murkowski, Chairman
Water and Power Subcommittee
Senate Committee on Energy and Natural Resources
United States Senate
Washington, DC 20510

Dear Senator Murkowski:

On June 11, 1985, your committee will consider S426, a bill that would clarify the preference clause of the Federal Power Act and eliminate utility claims to a "preference" in the relicensing of hydroelectric power projects, while establishing just compensation in the event of a takeover.

The City of Los Banos has gone on record of supporting these kind of changes to the Federal Power Act.

As a co-sponsor of S426 you have already done a great deal to support such vital legislation. We urge you to lobby your collegues in the Senate to unanimously support this bill when it comes before your committee.

Please make this letter a part of the record.

Thank you for your suport.

Sincerely

LORIS T. BRODDRICK
City Manager/Clerk Clerk

LTB/a

520 J STREET • P.O. BOX 31 • LOS BANOS, CALIFORNIA 93635 • TELEPHONE (209) 826-5119

CITY OF FIREBAUGH

1575 ELEVENTH STREET
FIREBAUGH, CALIFORNIA 93622
209/659-2043

FRESNO COUNTY, CALIFORNIA

DEPARTMENT City Manager

June 5, 1985

Honorable Frank H. Murkowski, Chairman
Water and Power Subcommittee
Senate Committee on Energy and Natural Resources
United States Senate
Washington, DC 20510

Dear Senator Murkowski:

On June 11, 1985, your committee will consider S426, a bill that would clarify the preference clause of the Federal Power Act and eliminate utility claims to a "preference" in the relicensing of hydroelectric power projects, while establishing just compensation in the event of a takeover.

The City of Firebaugh has gone on record of supporting these kind of changes to the Federal Power Act.

As a co-sponsor of S426 you have already done a great deal to support such vital legislation. We urge you to lobby your collegues in the Senate to unanimously support this bill when it comes before your committee.

Please make this letter a part of the record.

Thank you for your support.

Sincerely,

PERRY POWERS
City Manager

June 18, 1985

Hon. Frank H. Murkowski
Chairman
Water and Power Subcommittee
Senate Energy Committee
Senate Office Building
Washington, D.C. 20510

Dear Chairman Murkowski:

On behalf of the Great Lakes Electric Consumers Association, I would like to express our association's opposition to S. 426 and similar bills proposing to amend the hydroelectric relicensing provisions of the Federal Power Act which would alter or abolish preference for public bodies and municipalities upon privately-held license expiration. GLECA is the regional organization of municipal and rural electric cooperatives in the thirteen states of Delaware, Illinois, Indiana, Iowa, Maryland, Michigan, Minnesota, New Jersey, New York, Ohio, Pennsylvania, Wisconsin and West Virginia.

The Federal Power Act provisions on preference in relicensing represent a long-standing policy that our nation's waters, owned by all citizens, will never be subject to monopolization by private interests. Debate on whether the people of the nation would control their own water when hydroelectric power was beginning to thrive began in the 1800's. The issue was clear then and now - should private interests occupy a monopoly position in the development of hydroelectric power. That debate continued until the Act was passed in 1920. S.426, if enacted, would undo the competitive balance of the Act, and destroy the nation's policy that its waters will not be subject to the control of private interests in perpetuity. Under the preference provisions of the Act the nation's waters have not been monopolized. The Act is working, with public, private, cooperative, and state entities holding licenses for hydroelectric projects.

Competition in hydroelectic licensing is now intact. It should stay that way, through the preference provisions and Federal Energy Regulatory Commission review of competing applications for existing projects under the "best adapted" and "comprehensive use" standards of the Act. Those goals would be lost under S.426. In a competitive environment, the licensing of existing projects can be subject to full examination of changing or upgrading project operation or design for such purposes as domestic water supply, industrial water supply, power from the project, irrigation, flood control, recreation, and many other uses. S.426 would eliminate incentive of competitors seeking a license based on the best use of an existing project.

GREAT
LAKES
ELECTRIC
CONSUMER
ASSOCIATION

Suite 732
2100 Pennsylvania Ave., N.W.
Washington, D.C. 20037
Phone: (202) 296-3788

Private entities obtained licenses with the full knowledge that they were limited to a maximum 50 year term, and entitled to payment plus severance damages if they did not retain the license for the project. S.426 is designed to eliminate preference as one of the competitive protections on relicensing. Yet, the record simply does not support the case being put forth by some private companies that all private projects will be licensed to a preference entity. Only 11 of the 130 licenses which have expired to date are being contested by preference entities. There is no assurance under the Act that all preference competitors will end up with a new license, as the Commission must still make a determination that the best proposal prevails. Other limiting factors include distance from a project, need for power, compatibility of a project with existing resources, cost, and the condition of a project. These factors make it clear that preference on relicensing, just as in initial licensing, will not mean that every project will be licensed to a preference entity.

Congress has never allowed private occupation of the nation's water resources in perpetuity, as would S.426. Use of federal resources of all types are subject to time limits, competition, and other restrictions. Licensing of hydroelectric projects with limited terms is consistent with this national policy, the key provision being that the public, through the preference clause, retains the right to take back a project after license expiration. Without preference, smaller public entities, such as municipal electric utilities would more than likely have difficulty in securing the financing necessary to compete for a project upon license expiration when that project is held by a private entity many times larger and richer in financial resources. Preference assures that a competitive opportunity to obtain an existing project is available to local communities, not just large private license holders.

GLECA members are working to bring the benefits of federal hydroelectric power to the GLECA region. Studies by the Department of Energy have shown that there is up to 3000 megawatts of undeveloped hydroelectric potential in the region which could be developed by the federal government, bringing the benefits of transmission, reliable sources of power, and planning through a federal power marketing administration now experienced by virtually every other part of the nation. A recent study by the Northeast-Midwest Institute, "Trading in Power," suggested as an option for the Great Lakes region the creation of a "Great Lakes Power Marketing Administration through DOE to develop hydroelectic capacity at existing Corps of Engineers dam sites and to market the power."

In addition to federal development of new hydroelectic capacity, GLECA believes that federal recapture of projects now being held by private entities should occur upon license expiration. Under the Federal Power Act one of the principle antimonopoly provisions was the first right given to the federal government to recapture projects, thus insuring citizen control of public waters. That right has not been exercised by the federal government. Yet, it represents an opportunity for the GLECA area to bring the benefits of federal hydroelectic programs to our region. GLECA urges the Subcommittee to examine the great potential of mandatory federal recapture, which would insure that the consumers of the Great Lakes region are no longer deprived of a federal power program. Those areas of the country with federal hydroelectric development enjoy lower rates, regional planning, regional transmission, and are assured of competition between utilities under which the ultimate consumer benefits.

GLECA urges the subcommittee to take no further action on S.426 and similar measures which would change the preference provisions of the Federal Power Act upon hydroelectric license expiration.

I would like to request that this statement be made a part of the formal record of the hearing held by the subcommittee on June 11, 1985.

Sincerely,

Frank W. Frisk J.,

Frank W. Frisk, Jr.
Executive Director

FWF/sn

Santa Maria Valley Republicans

P. O. Box 1494
612 So. Broadway
Santa Maria, CA 93456

June 4, 1985

Honorable Frank J. Murkowski, Chairman
Water & Power Subcommittee
Senate Committee on Energy & Natural Resources
United States Senate
Washington, D. C. 20510

Sir:

The Officers and Members of the Board of Directors of the SANTA MARIA VALLEY REPUBLICANS of Santa Maria, California, strongly urge your support of S 426, a bill that would clarify the preference clause of the Federal Power Act and eliminate municipal utility claims to a "preference" in the relicensing of hydroelectric power projects, while establishing just compensation in the event of takeover.

Municipal preference at relicensing time would result in the diversion of low-cost power from millions of customers of regulated utilities to the benefit of a privileged few customers of municipal utilities who for the most part already have access to cheap federally subsidized power.

Confusion in interpretation of the Federal Power Act has led to conflicting decisions about application of preference on the part of the Federal Energy Regulatory Commission. The legislation now before your committee will resolve the question and benefit millions of consumers throughout the nation.

We respectfully ask that our position be put into the record of your proceedings.

Sincerely,
Officers & Board of Directors
SANTA MARIA VALLEY REPUBLICANS
Marjorie Ziemba, President

Martha Westfall
Corresponding Secretary

REALTOR®

Santa Maria Board of Realtors

222 W. CARMEN LANE, SUITE 102 SANTA MARIA, CALIFORNIA 93454
PHONE 805/922 7888

Officers and Directors
1985

Dan Firth
President

Kathryn Bernerd
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Burt Fugate (1986)
Doris Vosburg (1986)

Doris Davenport
Executive Officer

June 14, 1985

To: Hon. Frank Murkowski, Chairman
Members of Senate Committee on Energy and Natural Resources
Subcommittee on Water and Power

The SANTA MARIA BOARD OF REALTORS®, of Santa Maria, California, asks that you support S426, a bill that responds to an issue of fairness and equity for millions of our nation's consumers. At stake are billions of kilowatthours of low-cost hydroelectricity. This inexpensive, renewable power could be taken away from the vast majority of electric consumers and made available to only a small segment of the population who are served by municipally owned utilities.

A lack of clarity in the Federal Power Act, combined with conflicting interpretations by the Federal Energy Regulatory Commission, has led to an ongoing and costly debate as to the application of "preference" at the time of relicensing of hydroelectric facilities. Existing licensees that had operated these facilities in the public interest, whose customers had paid for their development and construction, would, if the municipal utilities had their way, lose their plants and their customers would face increased electric rates.

S 426 will clarify the Federal Power Act, and ensure that preference will not apply at the time of relicensing hydroelectric facilities. The bill will establish just compensation in the event that a project should be lost.

The legislation will assure the benefits of hydroelectric power for the greatest number of people. In the opinion of the SANTA MARIA BOARD OF REALTORS® that is correct public policy.

Please enter our comments into the record.

Sincerely,

SANTA MARIA BOARD OF REALTORS®
Dan Firth, President

DD

cc R.L. Royster, Pacific Gas and Electric Co, Santa Maria Office

PUBLIC OWNERSHIP LEAGUE
OF
COWLITZ COUNTY

P.O. Box 430, Longview, WA 98632

June 21, 1985

U. S. Senate
Subcommittee on Water
and Power of the
Committee on Energy and Natural Resources
SH-212 Hart Senate Office Building
Washington, D. C. 20510

Honorable Frank H. Murkowski, Chairman:

By letter dated May 3, 1984, I submitted for the record of the Subcommittee on Energy Conservation and Power a Resolution opposing H.R. 4402 which was adopted by the Public Ownership League of Cowlitz County, Washington on April 24, 1984. It is our understanding that your Committee has scheduled a hearing on June 25, 1985 on H.R. 44 and other Bills introduced in this Congress with respect to hydro power relicensing.

The position of the Public Ownership League of Cowlitz County to changes proposed to the Federal Power Act with respect to hydro power relicensing last year is equally applicable to Bills introduced in this Congress; therefore, we reaffirm our position and ask that this letter and our Resolution be made a part of the record of the hearing scheduled for June 25, 1985.

Sincerely,

Karl Jonasson, Chr

Karl Jonasson, Chairman
POL Energy Committee

ml

Attachment

PUBLIC OWNERSHIP LEAGUE OF COWLITZ COUNTY
STATE OF WASHINGTON

A RESOLUTION Opposing H. R. 4402 Introduced by Representative Richard Shelby (D., Alabama) to Amend the Federal Power Act.

WHEREAS, the Public Ownership League of Cowlitz County, Washington, is an organization of citizens formed for the purpose of promoting "community awareness and political responsibility through informed and active participation of its members, in Cowlitz County government and any other publicly served and/or owned entity"; and

WHEREAS, the Public Ownership League ". . . shall act on recommendations presented by the authorized delegates of the Cowlitz County Granges, Cowlitz County Central Labor Council or other member Cowlitz County organizations . . ."; and

WHEREAS, the Energy Committee of the Public Ownership League has presented information to this body, in regular meeting assembled, with respect to H. R. 4402 introduced by Congressman Richard Shelby and sixty-two cosponsors which would amend the Federal Power Act to repeal public preference in the relicensing of existing hydroelectric projects, eliminate competition in the relicensing of such projects by granting private corporations a right to retain existing licenses for use of a public resource in perpetuity, and alter the "net investment" and "severance damage" method of compensating licensees who are not relicensed, to the detriment of the public to whom the water resource belongs; and

WHEREAS, H. R. 4402 is one of several bills to be considered in a formal hearing by the House Energy and Commerce Subcommittee on Energy and Power on the 17th day of May, 1984 and the rules of the Subcommittee permit written comments for the record,

NOW, THEREFORE, BE IT RESOLVED that the Public Ownership League of Cowlitz County, Washington hereby direct its Energy Committee to submit a copy of this resolution for the record of the hearing upon H. R. 4402 that it may be made known to the members thereof that the preference provisions of the Federal Power Act are threatened by H.R. 4402 in three very significant respects:

1. The bill repeals the public preference in relicensing of hydroelectric projects.

2. The bill would bias the relicensing process in favor of the existing licensees to such an extent that competition in relicensing would be eliminated. The bill provides that in relicensing proceedings, the new license "shall" be issued to the existing licensee unless, in FERC's judgment, the licensees' plans will not meet the licensing standards set forth in section 10(a) of the Federal Power Act. FERC must also consider the public benefits provided by the licensee over the course of the original license.

3. The bill replaces the just "net investment" and "severance damages" method of compensating licensees who are not relicensed under present law with a vague method of compensation to be determined by the Commission "in accordance with due process of law."

BE IT FURTHER RESOLVED that the false premise of H.R. 4402 that an existing licensee has a vested property right in the public's flowing water resource be refuted, and that the principle recognized by the Congress in passage of the Federal Power Act that a hydroelectric project licensee receives only a long-term lease to use and profit from the flowing water resource for the term of the license be supported and upheld through every means available to the Public Ownership League.

PASSED and ADOPTED at a regular meeting of the Public Ownership League of Cowlitz County, State of Washington, on the 24 day of April, 1984.

James Hedges Pres.

S. V. Nelson – Sec.

Karl Jonasson, chr. Energy Committee

Second of Two Pages

CATLIN GRANGE NO. 199

STATE OF WASHINGTON

June 21, 1985

U. S. Senate
Subcommittee on Water
and Power of the
Committee on Energy and Natural Resources
SH-212 Hart Senate Office Building
Washington, D. C. 20510

Honorable Frank H. Murkowski, Chairman:

Enclosed is a Resolution adopted by the Catlin Grange on May 3, 1984 opposing H.R. 4402 (reintroduced in the Senate as S.426) which we submit for your consideration at the hearing that was held on June 11, 1985. We ask that this Resolution be included in the record of the hearing.

Sincerely,

Lester V. Black
Past Master and Member
Executive Committee of
CATLIN GRANGE No. 199

ml

Attachment

CATLIN GRANGE NO. 199, STATE OF WASHINGTON

A RESOLUTION Opposing H. R. 4402 Introduced
by Representative Richard Shelby (D., Alabama)
to Amend the Federal Power Act.

WHEREAS, the Granges of the State of Washington, of which Catlin Grange No. 199 is a member, have had a prominent role in preserving the water resources of the State for the people; and

WHEREAS, H. R. 4402 introduced by Congressman Richard Shelby and sixty-two cosponsors would amend the Federal Power Act to repeal public preference in the relicensing of existing hydroelectric projects, eliminate competition in the relicensing of such projects by granting private corporations a right to retain existing licenses for use of a public resource in perpetuity, and alter the "net investment" and "severance damage" method of compensating licensees who are not relicensed, to the detriment of the public to whom the water resource belongs; and

WHEREAS, H. R. 4402 is one of several bills to be considered in a formal hearing by the House Energy and Commerce Subcommittee on Energy and Power on the 17th day of May, 1984 and the rules of the Subcommittee permit written comments for the record,

NOW, THEREFORE, BE IT RESOLVED that Catlin Grange No. 199 of the State of Washington does hereby direct a copy of this resolution be submitted for the record of the hearing upon H. R. 4402 that it may be made known to the members thereof that the preference provisions of the Federal Power Act are threatened by H. R. 4402 in three very significant respects:

1. The bill repeals the public preference in relicensing of hydroelectric projects.
2. The bill would bias the relicensing process in favor of the existing licensees to such an extent that competition in relicensing would be eliminated. The bill provides that in relicensing proceedings, the new license "shall" be issued to the existing licensee unless, in FERC's judgment, the licensees' plans will not meet the licensing standards set forth in section 10(a) of the Federal Power Act. FERC must also consider the public benefits provided by the licensee over the course of the original license.
3. The bill replaces the just "net investment" and "severance damages" method of compensating licensees who are not relicensed under present law with a vague method of compensation to be determined by the Commission "in accordance with due process of law."

BE IT FURTHER RESOLVED that the false premise of H. R. 4402 that an existing licensee has a vested property right in the public's flowing water resource be refuted, and that the principle recognized by the Congress in passage of the Federal Power Act that a hydroelectric project licensee receives only a long-term lease to use and profit from the flowing water resource for the term of the license be supported and upheld through every means available to the Catlin Grange No. 199.

PASSED and ADOPTED at a regular meeting of Catlin Grange No. 199 of the State of Washington, on the 30 day of May, 1984.

Frank [illegible] - Master

[illegible]
Past Maste

Esther [illegible]
Exec Committee

County Supervisors
Association of California

June 17, 1985

The Honorable Frank M. Murkowski
Chairman, Subcommittee on Water and Power
Senate Energy and Natural Resources
212 Dirksen Senate Office Building
Washington, DC 20510

Dear Senator Murkowski:

You will find enclosed my testimony for the Senate Energy Committee's Subcommittee on Water and Power on behalf of S. 426.

This testimony is submitted on behalf of the County Supervisors Association of California and also as an elected official from the County of Contra Costa. If you need further information, please let me know.

Sincerely,

Sunne Wright McPeak

Sunne Wright McPeak
Immediate Past President

CSAC EXECUTIVE COMMITTEE President SUNNE WRIGHT McPEAK Contra Costa County ■ First Vice President STEPHEN C. SWENDIMAN Shasta County ■ Second Vice President LESLIE K. BROWN Kings County ■ Immediate Past President JAMES EDDIE Mendocino County ■ MICHAEL D. ANTONOVICH Los Angeles County ■ ILLA COLLIN Sacramento County ■ ROBERT E. DORR El Dorado County ■ PAUL FORDEM San Diego County ■ JAN HEWITT Solano County ■ QUENTIN L. KOPP City & County of San Francisco ■ CAL McELWAIN San Bernardino County ■ HAROLD MOSKOWITE Napa County ■ B.A. PRICER Plumas County ■ BARBARA SHIPNUCK Monterey County ■ HARRIETT M. WIEDER Orange County ■ ADVISORS County Administrative Officer MEL HING Alameda County ■ County Counsel JAMES P. BOTZ Sonoma County ■ Executive Director LARRY E. NAAKE

Testimony in Support of S. 426
Senate Energy Committee
Subcommittee on Water and Power
by
Supervisor Sunne Wright McPeak
Immediate Past President
County Supervisors Association of California
June 14, 1985

My name is Sunne McPeak. I am an elected County Supervisor from Contra Costa County, California. I am the Immediate Past President and serve on the Executive Committee of County Supervisors Association of California (CSAC). I am speaking for the Association and the 58 counties the organization represents.

Among the many public policy questions facing the 99th Congress, one addresses an issue of critical importance to millions of electric customers, namely, the relicensing of hydroelectric projects across the nation. S. 426, introduced by Senator Malcolm Wallop, is designed to provide fair and equitable treatment during the relicensing process for the majority of the nation's consumers of electricity.

Since the Federal Power Act was enacted in 1920, investor-owned utilities have undertaken the financial and technological risks to develop hydroelectric facilities that provide low cost, fuel-free power for their customers. During the past 60 years, their customers have paid for the development and operation of these facilities through their electric rates. Today, however, there is a movement by a privileged few to take over, without paying just compensation, hydroelectric projects which now benefit many.

By 1944, licenses of 177 hydroelectric projects operated by investor-owned utilities come up for renewal. Some of these licenses, which originally were issued for a maximum of 50 years, are now being contested by municipally operated utilities claiming that the Act gives them a preferred status -- a "preference"-- over investor-owned utilities. Because of the tremendous economic benefits of these existing projects, many more challenges can be expected. Giving the government systems a "preference" to take away hydro power facilities developed by investor-owned utilities and paid for by their customers is unfair, inequitable and wrong.

Unless the 99th Congress acts quickly to clarify that municipal preference does not apply to relicensing, millions of electric consumers will be penalized in order that a selected few may benefit. S. 426 provides that any existing licensee will receive a new license unless the Federal Energy Regulatory Commission determines, when judging competing applications according to criteria in the law, that the existing licensees' project is not the one "best adapted" to utilize this important natural resource. Additionally, S. 426 would require just compensation in exchange for the physical assets and their associated value if a new license were issued to a successful competitor.

Millions of consumers deserve the fair and equitable treatment that S. 426 provides. The low-cost benefits of our nation's most valuable renewable energy source should be shared as widely as possible, not concentrated in a small segment of the population.

On behalf of the 58 counties in California and the 20 million consumers our Association represents, I urge the passage of S. 426 to assure that benefits of this low cost energy resource are shared among the majority of the nation's electric consumers.

Thank you for the opportunity to present our views on this important issue.

CITY OF SAN JOSE, CALIFORNIA
801 NORTH FIRST STREET
SAN JOSE, CA 95110
(408) 277-4237

THOMAS McENERY
MAYOR

May 30, 1985

Hon. Frank H. Murkowski, Chairman
Water and Power Subcommittee,
Senate Committee on Energy and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Senator Murkowski:

As Mayor of the City of San Jose, California, I urge you to support S426. This legislation would clarify the preference clause of the Federal Power Act and would set a just compensation price if a regulated utility were to lose a hydro project.

This is an important piece of legislation which benefits the community of San Jose by maintaining fair access to inexpensive hydro-electric power. Your sponsorship of the bill is deeply appreciated, and your efforts to make the bill law will assist consumers throughout the nation.

In supporting it, I support the relicensing of the four contested PG&E projects to the utility and its customers who, including my constituents, paid for development and construction. The benefits of the contested hydroelectric power projects should rightfully remain with the regulated utilities and the people they serve.

I respectfully ask that my comments be made part of the record.

Sincerely,

Tom Mc

Thomas McEnery
Mayor

DeWAYNE HOLMDAHL
County Supervisor

Telephone
Lompoc 805-736-5621
Santa Barbara 805-966-1611

COUNTY OF SANTA BARBARA
BOARD OF SUPERVISORS
FOURTH DISTRICT
401 East Cypress
Lompoc, California 93436

May 31, 1985

Honorable Frank Murkowski, Chairman
Members of Senate Committee on Energy and
Natural Resources
Subcommittee on Water and Power

I, DeWayne Holmdahl, Supervisor Fourth District, 401 E. Cypress, Lompoc, California, asks that you support S 426, a bill that responds to an issue of fairness and equity for millions of our nation's consumers. At stake are billions of kilowatthours of low-cost hydroelectricty. This inexpensive, renewable power could be taken away from the vast majority of electric consumers and made available to only a small segment of the population who are served by municipally owned utilities.

A lack of clarity in the Federal Power Act, combined with conflicting interpretations by the Federal Energy Regulatory Commission, has led to an ongoing and costly debate as to the application of "preference" at the time of relicensing of hydroelectric facilities. Existing licensees that had operated these facilities in the public interest, whose customers had paid for their development and construction, would, if the municipal utilities had their way, lose their plants and their customers would face increased electric rates.

S 426 will clarify the Federal Power Act, and ensure that preference will not apply at the time of relicensing hydroelectric facilities. The bill will establish just compensation in the event that a project should be lost.

The legislation will assure the benefits of hydroelectric power for the greatest number of people. In my opinion that is the correct public policy.

Please enter my comments into the record.

Sincerely,

DeWayne Holmdahl

DeWayne Holmdhal
Supervisor Fourth District

DeWH:cw